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Volume CLXIX No. 2203

The SPHERE, London, April 11, 1942

THE SPHERE

With which is incorporated "THE GRAPHIC"

The Empire's Illustrated Weekly

London, April 11, 1942

**THE GREAT RAID ON THE GERMAN BASE AT ST. NAZAIRE: THE EX-AMERICAN DESTROYER "CAMPBELTOWN" carries out her last mission by destroying the dock gates. How she finished up, after dashing up the channel at 20 knots, piled high up on the gates before the final explosion**—*Drawing by Montague Dawson*

As related in full in subsequent pages of this issue, the culminating point of the raid on the German naval base at St. Nazaire was the blowing-up of the dock gates by the ex-U.S. destroyer *Campbeltown*: this is the subject of Mr. Dawson's picture above. Having steamed up the navigable channel (as shown on page 36), *Campbeltown* finished her last journey by magnificently shooting-up a German *flak* ship which she left in flames before speeding up to about 20 knots for the charge into the dock gates. "She piled herself up on to them with the sureness of a ferret diving into a hole," as one eye-witness declared. At the same time a British gunboat nosed her way round the stern of the *Campbeltown* which at that moment was stuck up by the bows as if climbing a steep hill. There were five tons of high explosive in her specially reinforced hull, and this terrific load was exploded by time-fuse a little later. Subsequent reconnaissance proved (as indicated in the fine aerial photograph reproduced on page 35) that the outer lock gates had disappeared!

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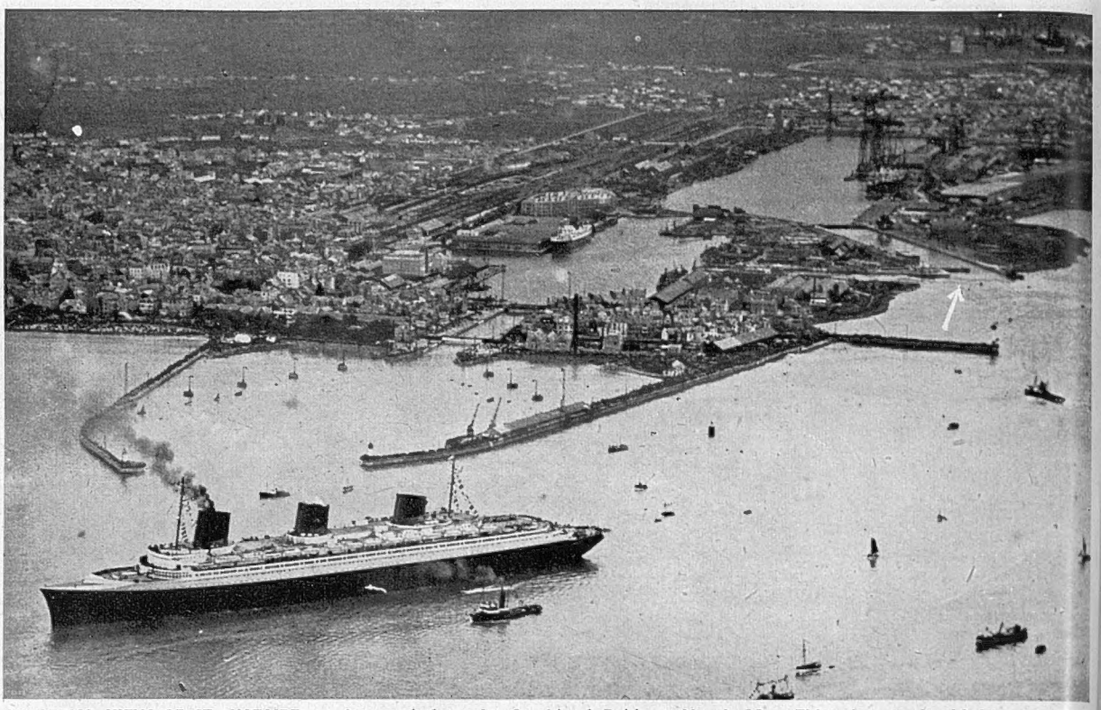
# A WAR NEWSLETTER —No. 136

1, NEW OXFORD STREET, W.C.1.

**St. Nazaire.**—The latest combined Services raid into Occupied territory, if it proved more costly than others, appears to have achieved its main object, which was of great importance in the present less satisfactory phase of the eternal Battle of the Atlantic. This raid had many features in common with Zeebrugge—the greatest of all such "cutting-out" expeditions. It is too late for me to make a commentary on the details released. I shall make but one historical footnote. This type of expedition has been for about 400 years the peculiar prerogative of our race, and in its technique and timing-organisation we admit no rivals. It is just the kind of deed of daring, involving enormous pains and technical skill in the handling of craft of all kinds and small bodies of men allocated to diverse and definite tasks, which a nation of seafarers, which has not behind it centuries of experience in the organisation of Continental-scale armies, can do to perfection. We were acquiring the vital experience and technique required for this St. Nazaire raid as long ago as 1580, and we have piled them up for use whenever occasion offered since that time. Our percentage of success has been very high, and for 400 years volunteers have fought for the honour of sharing the danger and the triumph. St. Nazaire has an importance beyond its immediate military objective. It gives an answer more effective than written or spoken words (for we are *not* yet masters of propaganda) to the innuendoes of the quisling critics in this and other Allied nations who have resumed their whispering campaign against Britain.

**Allies and Unity.**—I think it is time to employ a little more common sense and realism in checking our reactions to instances which come to our notice of criticism and bitterness and even suspicion among the Allied nations. These instances at first come like a cold douche on the ideal "white flame" of enthusiasm for the great cause. It is depressing reading. But, on reflection, if you admit that in a most united democracy (such as ours) the voice of bitter criticism will often be heard, how much more must you expect it among Allied nations, so utterly different in character, habits and manner of thought as are (say) the British, the American, the Russian, the Dutch, the Chinese. We have a century of ignorance to repair in our comprehension of the national characters of our Allies, and they of ours. To-day we read with a sorrow and disappointment which the *realistic* view does not justify, that in parts of America there is daily voiced bitter criticism of the British effort and strategy; that the Russians are expecting altogether too much of us; that the Dutch feel a sense of betrayal, and so on. We on our side can hardly believe that in this crisis of humanity there can be American politicians with one eye on the November elections, or American workers with one eye on wages or a forty-hour week and, a fortiori, we can sympathise with the Russians if they note these signs and portents in America with still more intense surprise and suspicion. But, if we realise that the Golden Age in international understanding is still a distant dream, we must accept the truth of that shrewd and generous verdict of the Russian peasant in Tolstoi's *Resurrection*, "We are none of us saints." On the contrary, the stress and misery of war bear hard on such saintliness as we possess. Tongues grow bitter and loose, and we grumble and gird. It cannot be otherwise. Let us not take it too tragically. The best way to gain more complete understanding of our friends (and in consequence more harmony) is to put our shoulders 100 per cent. to the wheel.



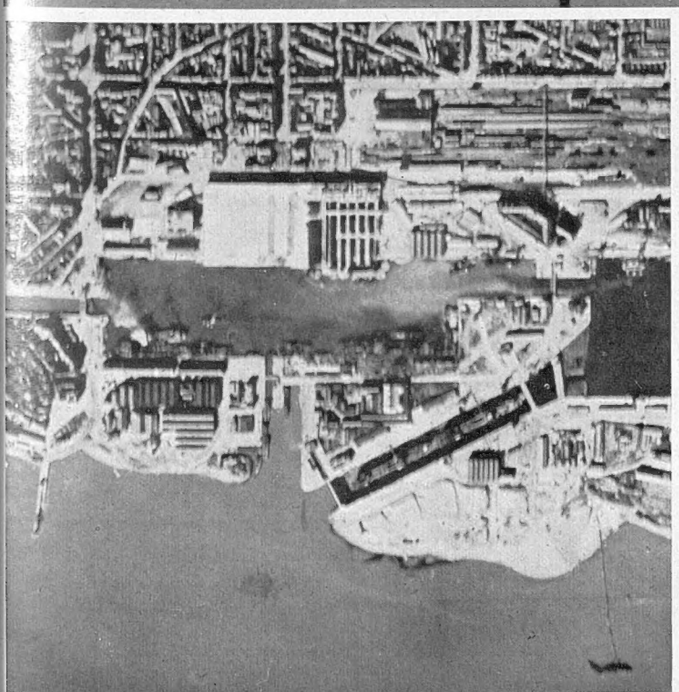
**AN AERIAL VIEW OF ST. NAZAIRE, as it was before the Combined Raid on March 28. This picture should be compared with that taken by the R.A.F. after the Raid which is reproduced on the facing page. The outer lock gate which was the centre of the attack, is here indicated by an arrow. Incidentally, the vessel in the foreground is the huge French liner "Normandie," which recently met with a tragic fate in New York**

**_This_ Year — Not Next Year.**—M. Maisky has now put the Russian point of view often enough, and in hints clear enough, for the least sensitive Briton to understand precisely what it is which M. Stalin expects of his chief Allies this spring and summer. Hitler is staking all on the summer of 1942. Before autumn he must have smashed Russia and smashed his way through to unlimited oil. If he fails in these projects, or one of them, his goose is cooked and can be eaten at comparative leisure by the Allies. Russia is strong and not lacking in confidence, but realises that it will be nip and tuck. She cannot bear the whole brunt. Two aggressive Allied fronts are essential, and three would be better. In a word, she expects Britain and America to stage this early summer comparatively large-scale and sustained offensives and not periodic raid diversions. No doubt Stalin has in mind Libya, the occupied countries of Europe and perhaps the Italian coast as possibles. We may be pretty certain that, unless the Nazi effort prove infinitely less formidable than is generally anticipated, Russia will be hard put to it to stand up, and the responsibility of the Democracies for sharing the weight of the new Nazi effort is regarded by Stalin as as much a point of honour as a point of vital strategy. To force those principles upon the Democracies, M. Stalin's mouthpiece has, under instructions, cut from under our feet all withholding scaffolding and planks. We must take big risks. We must not speak of "not risking another Dunkirk"; we can't afford to argue that we shan't be ready till 1943; we can't wait for the "last button"; we must employ *this summer* all the weapons we have *this summer*; we must not keep all our forces locked up in Britain against the possibility of invasion. Russia is as important as Britain. If Russia goes, all goes. Russia may go if Britain and America do not *march*, abroad, at the vital hour, and share the weight and create the essential diversion of Hitler's last effort. Clear as print, that is Stalin's view. It is also Stalin's warning. We also must stake all on 1942. Can anyone doubt the clearness and gravity of Stalin's ultimatum?

**"Under Local Arrangements."**—I do not doubt that our leaders have taken note of it. I shall be surprised if they have not accepted it in principle. The urge to ensure that our next major effort on land shall not fail again through lack of preparation is understandable. But the grave risks *must* be taken. We must forget our Dunkirk complex. We must weigh the chances of invasion and even the chances of another only partial success (or even defeat) in a land campaign against the vital value to Russia of a major diversion of Hitler's available resources. I confess that, hearing so clearly and loudly this warning from Russia, I was disappointed by the mild and equivocal pronouncement on the civilian's duty in invasion made by Sir John Anderson. No doubt there is cause for pride in his faith in the average Briton when called on to defend his home and family. But as a nation we are not born organisers. We are slow to accept as inevitable the "unspeakably awful." We have been the spoiled darling of history. It is late in the day to hear that local committees are "exploring avenues." It is late in the day to know that the Government can still only hint at its policy of "scorched earth." It is quite meaningless to coo that old phrase about "leaving it to local committees who best comprehend local conditions." Local committees may be very good, or very bad. There are rural areas in Britain which, since the war began, have had every local war effort at organisation bungled by the same old barnacles who mismanaged their affairs in the 1930's—the quarrelsome and petty country solicitor, the crusty old cavalry general, the whey-faced grocer, with his increasing investments. In such areas it will not necessarily be "all right on the night." If ever the nation needed and cried for *direction*, for a brave, aggressive, ruthless, selfless call to duty and sacrifice and hard-hitting, it is to-day when the common man comprehends far more clearly than the statesman what is in the mind of Stalin; what are the hideous risks we are called on now to take; and what action is necessary to reduce those risks, without fear or favour, face-saving or foolish dislike of wounding the susceptibilities of entrenched weaklings. It is time to put away the umbrella and face the storm with eyes uncovered.

**Are We Pirates?**—Every journalist is, no doubt, a thief of other men's ideas, for journalists are plenty and ideas few (at least, sound ideas). But (except professionally and, *ergo*, inevitably) I am not a born thief, and I do not like consciously to steal a man's wares without acknowledgment. Nevertheless, I have done so of late, for I have a correspondent who sends me his ideas on every subject under the sun, from theology to tanks and thunderstorms, and seems to imply a desire for anonymity. To-day he supplies me with a theory to account for a problem which of late has puzzled and distressed me. Why is it that in England and America, in a time of extreme danger when our very existence as free nations hangs by a thread, the bulk of the peoples (encouraged by their Governments) think of their national service and duty in terms of pounds and dollars, and, as those services increase in number and weight, screw up their "terms" and ask for more? When a man lies on his death-bed, his bank balance and his gold plate fall into their proper perspective. "You can't take it with you." *Cedes coemptis saltibus.* We are surely at a critical phase in our national "health." Why, then, does money matter so much to us still? We know what they think about the war effort in Russia, and of the relations between public safety and private gains. We read how in Australia man-power is conscripted for Civil Defence service *without pay*. All over Europe millions are doing their silent "bit" for freedom, with death, not dollars, for reward. But here in England all too many continue to bargain for their services and to screw out higher wages and more bonuses as the price of their *privilege* to help save their country and their personal freedom. Why? A nation of shopkeepers? My anonymous friend (who, if he writes to permit it, I shall acknowledge by name) sends me this theory—*a nation of pirates!* "We are by nature pirates. The Saxon was a pirate, so was his friend the Jute. (*Vide:* Kipling's story of the Conversion of St. Wilfred.) The Normans were pirates. The Nordics who populated Britain north of Humber certainly *were* pirates. . . . All this agitation for higher wages and all the rest of it, is merely a manifestation of the piratical spirit." My friend has his constructive proposals (abolition of overtime, piece-work payment, etc.). I will not now go into them. It seems to me that so long as our own Government smiles on the scramble for money in this fearful crisis, so long as it contemns the parable of the labourers in the Vineyard, any concrete proposals are moonshine. The theory remains. A nation of pirates? Take it or leave it.

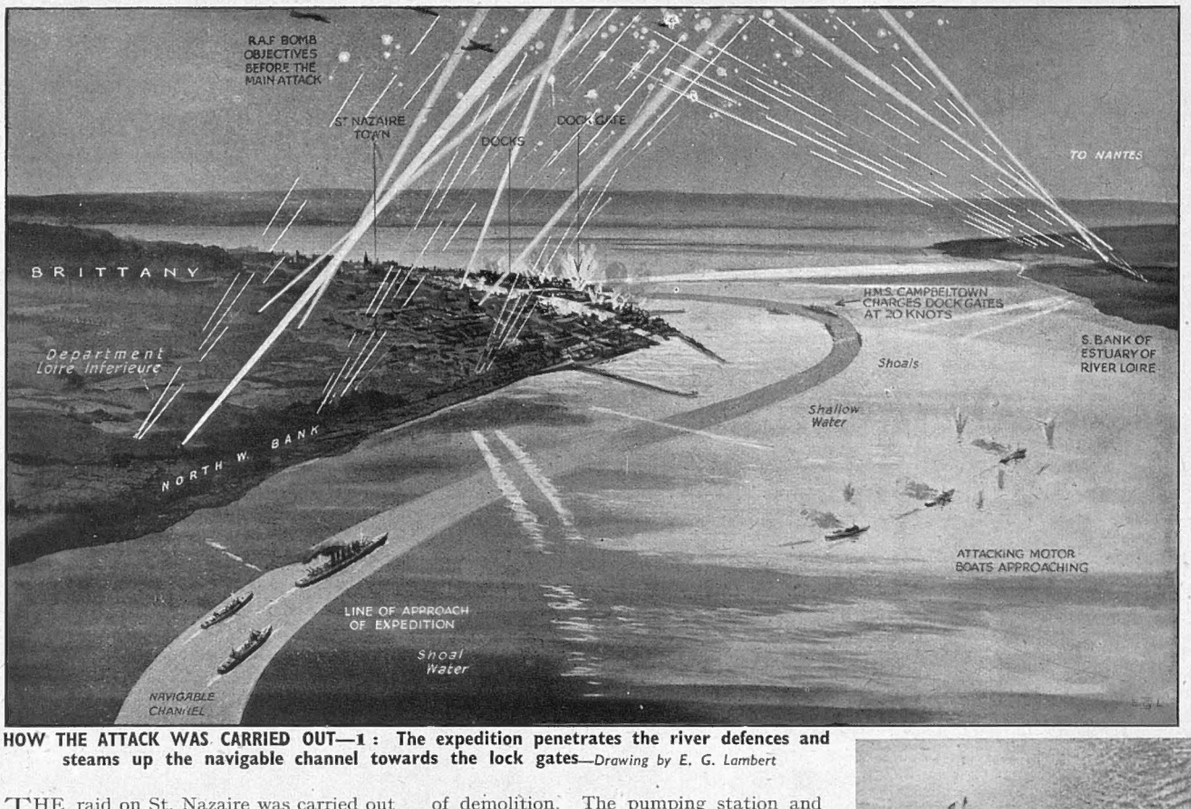
THE OLD STAGER



**THE WONDERFUL AERIAL PHOTOGRAPH SECURED BY THE R.A.F. SOME LITTLE TIME AFTER THE ST. NAZAIRE RAID: Neither H.M.S. "Campbeltown" nor the outer lock gates are visible! (On the left is a reconnaissance picture taken the day *before* the raid, which shows the outer lock gate in position)**

Flying at a great height, reconnaissance aircraft of the R.A.F. succeeded in taking several photographs of St. Nazaire after the great Combined Raid. These aircraft were subjected to persistent interference from enemy fighters in an attempt to prevent photography, while cloud presented a further complication. These factors resulted in only small-scale photographs; but examination by experts nevertheless discloses that the main object of the Raid—namely, the destruction of the outer lock gate of the Dock (which could accommodate a battleship of the *Tirpitz* class)—was successfully accomplished. There is no sign of H.M.S. *Campbeltown*, which presumably sank at the dock gates after the explosion of the five tons of high-explosive in her hull. The enemy claim that the lock gate is undamaged: normally this slides into a slot at the side of the lock. The impact of the ramming by H.M.S. *Campbeltown*, however, quite apart from the explosion, would have so distorted the surface as to make it impossible to slide it back. Moreover, the machine-house for operating the gate appears to be damaged. The gate at the other end of the lock appears to be intact. It is also clear that damage and destruction to dock buildings and installations was accomplished, although a more exact assessment must await further reports. The big picture above shows the preliminary interpretation made by the R.A.F. photographic experts as follows:

**1.** The outer lock gate is missing.
**2.** The dock pump-house is severely damaged.
**3.** The machine-house for operating the outer lock gate appears to be damaged.
**4.** Two small sheds of the pump-house have been completely destroyed—supporting the evidence that the damage to the dock pump-house was severe.
**5.** A large part of the five-bay building west of the hydraulic machine shop has been destroyed. The roof is missing.
**6.** Slight damage appears to have been done to the submarine pens under construction.
**7.** The south end of a multi-bay building is damaged.




**HOW THE ATTACK WAS CARRIED OUT—1 : The expedition penetrates the river defences and steams up the navigable channel towards the lock gates**—*Drawing by E. G. Lambert*

# HOW THE RAID WA CARRIED OUT

—*Special* Sphere *Drawin and Diagrams*

Their task accomplished, troops commenced to withdr in motor-launches detailed the purpose to rejoin the cov ing force of destroyers. Ene machine-guns appear to ha prevented the full withdrawal some of our forces : unfortunat amongst those who did not ret were Lieut.-Com. G. H. Beatt who was captain of the destro *Campbeltown*, and Lieut.-Colo A. S. Newman, who was in co mand of the special troops land to deal with the dock installatio Five German torpedo-boats ca into sight and opened fire on motor-launches. The escort destroyers drove them off a forced them to retire. (Altho classed by the Germans as t pedo-boats, these vessels similar to our "S" cla destroyers.)

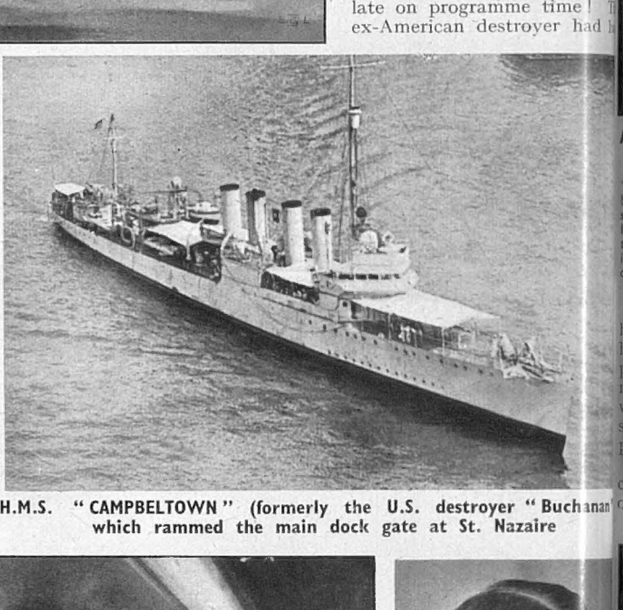
The actual ramming of main dock gate was carried at 1.34 a.m., only four minu late on programme time! T ex-American destroyer had

THE raid on St. Nazaire was carried out in the early hours of March 28. Taking part in the combined operations were light forces of the Royal Navy, Special Service Troops, and aircraft of the R.A.F. The assault was primarily directed against the large dry dock and the harbour installations at St. Nazaire.

H.M.S. *Campbeltown* (an ex-American destroyer, formerly the U.S.S. *Buchanan*) had had her bows specially stiffened and filled with five tons of delay-action high explosive. She forced her way through the double torpedo-baffle protecting the entrance to the lock, and rammed the centre of the main lock gate. The force of the impact was such that the destroyer came to a standstill only when her bridge was abreast the gate itself.

As soon as the bows of the *Campbeltown* were firmly wedged, Special Service Troops landed as arranged, and set about the work of demolition. The pumping station and dock operating gear were destroyed, and other demolition work was carried out according to plan. Meanwhile, a motor-torpedo-boat had fired two delay-action torpedoes at the entrance to the U-boat basin, and a motor-launch had taken off the crew of the *Campbeltown*. A large explosion, followed by a smaller one, was seen and heard by our returning forces at 4 a.m., which was the time the delayed-action fuses were due to go off.

The raid caused panic amongst the enemy, who fired indiscriminately at friend and foe. The enemy's 6-inch guns sank one of their own *flak* ships, at the time when she was engaging our returning forces. Only a small proportion of the diversionary bombing by the R.A.F. could be carried out, on account of low cloud, for fear of inflicting casualties on the French civilian population.



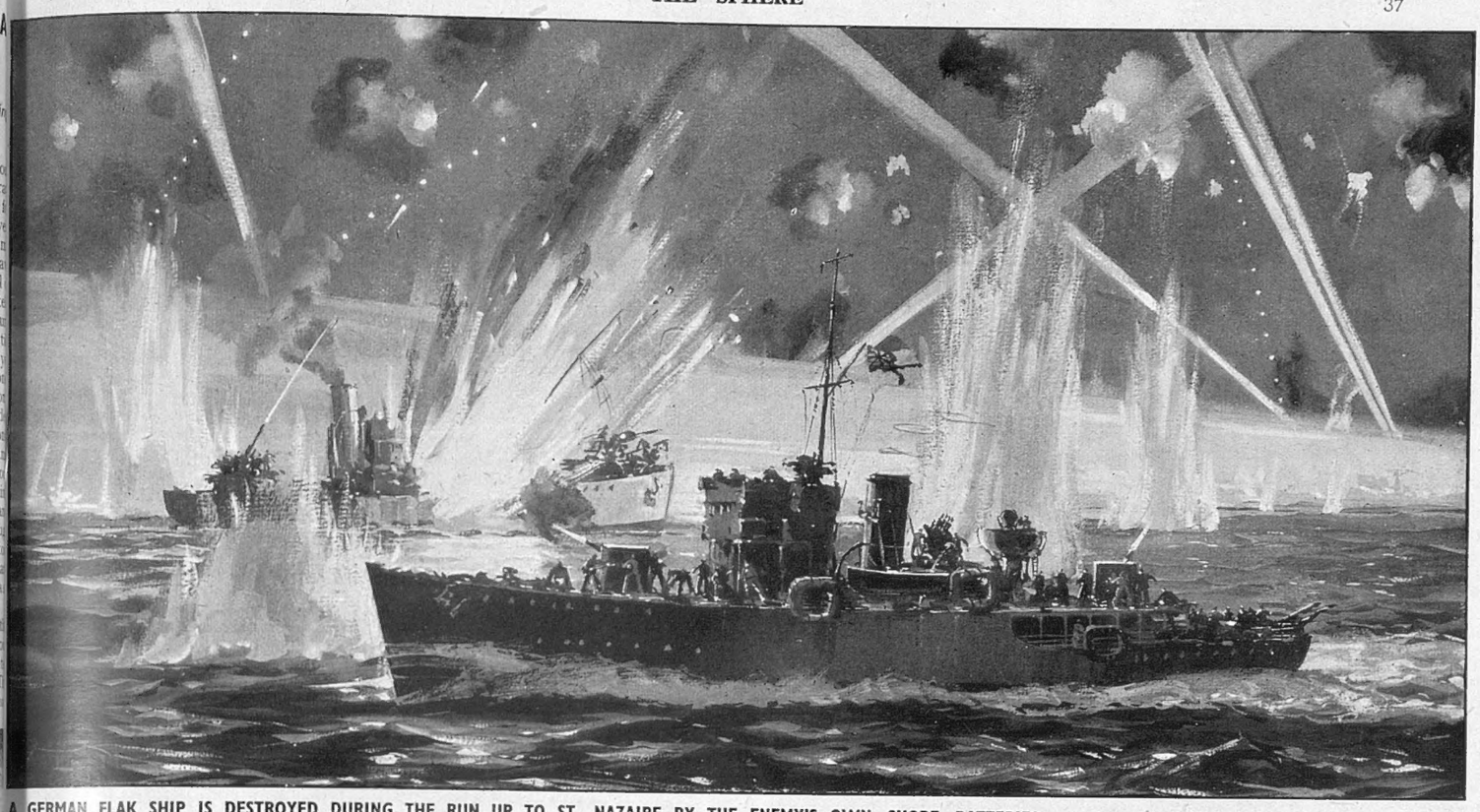
**H.M.S. "CAMPBELTOWN" (formerly the U.S. destroyer "Buchanan" which rammed the main dock gate at St. Nazaire**

**HOW THE ATTACK WAS CARRIED OUT—2 : Whilst the "Campbeltown" was crashing the outer lock gates, the work of demolition was going ahead amidst the dock installations at St. Nazaire**—*Drawing by E. G. Lambert*

Even before the bows of the *Campbeltown* were firmly wedged, Special Service Troops landed and set about their work. The pumping station and dock-operating gear were destroyed, and other demolitions were carried out according to plan. Meanwhile a motor torpedo boat had fired two delayed action torpedoes at the entrance to the U-boat basin and a motor launch had taken off the crew of the destroyer. A large explosion followed by a smaller one was seen and heard. The raid caused panic among the enemy, who fired indiscriminately at friend or foe!

**COMMANDER R. E. D. RYD who was in command the Naval forces**

**LIEUT.-COL. A. S. NEWM of the Essex Regim who led the Special vice Troops**



**A GERMAN FLAK SHIP IS DESTROYED DURING THE RUN UP TO ST. NAZAIRE BY THE ENEMY'S OWN SHORE BATTERIES: A dramatic incident witnessed by a special correspondent aboard the motor gunboat which carried the naval and military commanders**—*Drawing by Wm. McDowell*

"The run was a nightmare experience in which one small gunboat became the target for hundreds of enemy guns at comparatively short range," wrote the correspondent. "Picked out by searchlights, we made our best possible speed as gun after gun took up the attack. Only a hard turn to port prevented us from running into a German flak ship, lying in the middle of the river. She opened fire on us at 20 yards range, but with our last shells we silenced her. Then, as we escaped, we saw her destroyed by the concentrated fire of her own shore batteries, which seemed to believe she was a British gunboat lying disabled in mid-stream." The picture *on the left* shows some of the troops who took part in the St. Nazaire raid, photographed immediately after their safe return to a port in this country; in the centre is the officer who led them into action

her bows specially stiffened; and a delay-action fuse had been fitted to give our forces sufficient time to complete other demolition work and withdraw before the main explosion took place. The majority of her crew were evacuated by motor-launches. Beaufighters, Hudsons and Blenheims of Coastal Command provided air protection to our returning forces.

There is little doubt that this raid successfully accomplished its main task, which was the destruction of the gate of the large dock at St. Nazaire, the only one on the Atlantic coast capable of taking the *Tirpitz*. But, in addition, many other subsidiary demolitions were effected. According to reports, our Commando troops were in possession of one whole quarter of this important German-held port before even the enemy knew what was happening!

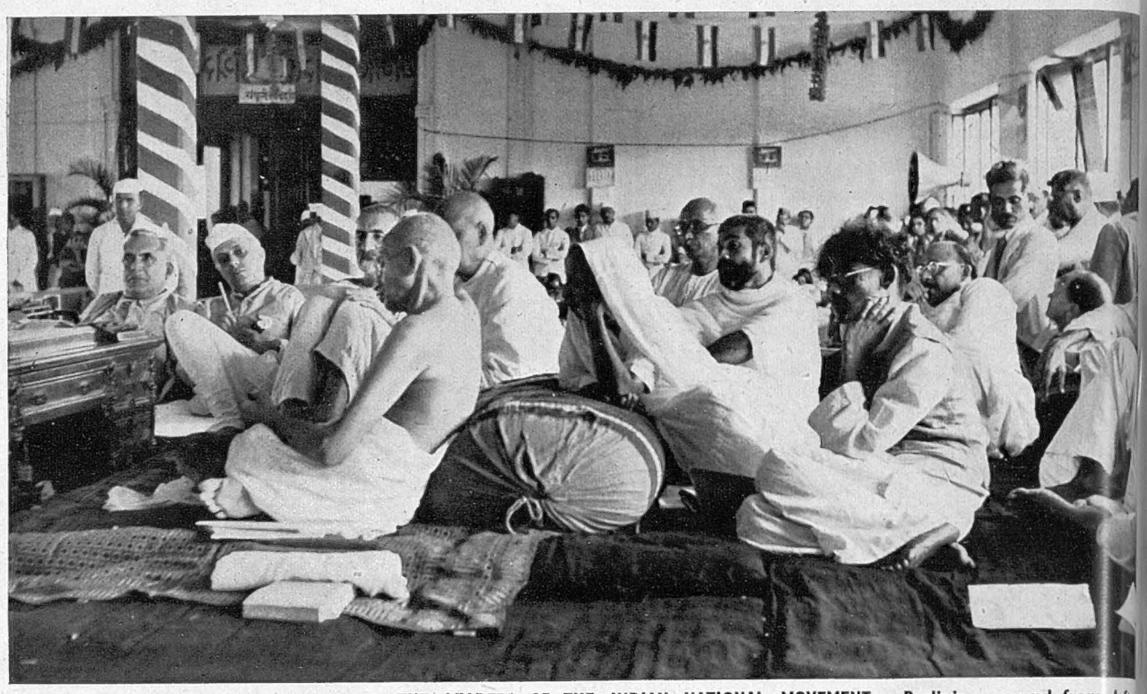
The fine aerial photograph reproduced on the preceding page will allow readers to judge for themselves of the damage wrought during this fine aggressive action.

**COLONEL NEWMAN, LEADER OF THE TROOPS, IS LANDED AT A DOCKSIDE** in order that he may join his Commando men, already hard at work demolishing harbour equipment—*Drawing by F. D. Blake:* **He jumped ashore, followed by his adjutant and small headquarters staff. "Good luck!" his companions shouted as he disappeared round some blazing buildings, making towards the dry dock. It has since been reported that neither Colonel Newman nor Lieut.-Commander Beattie (Captain of the "Campbeltown") returned from the raid with the rest of our forces**

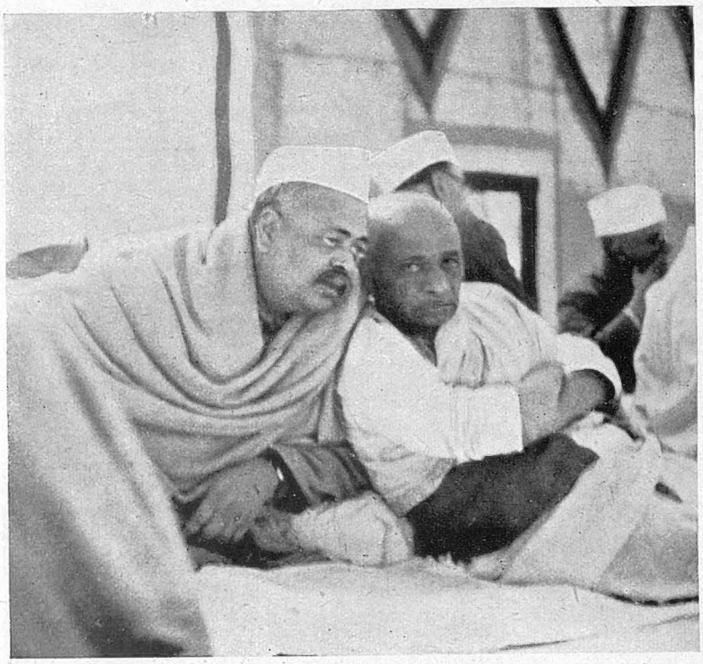
# CONGRESS and the GREAT INDIAN PROBLEM

**SIR STAFFORD CRIPPS, who took out the Cabinet's proposals to India and who has been negotiating with the Indian leaders**

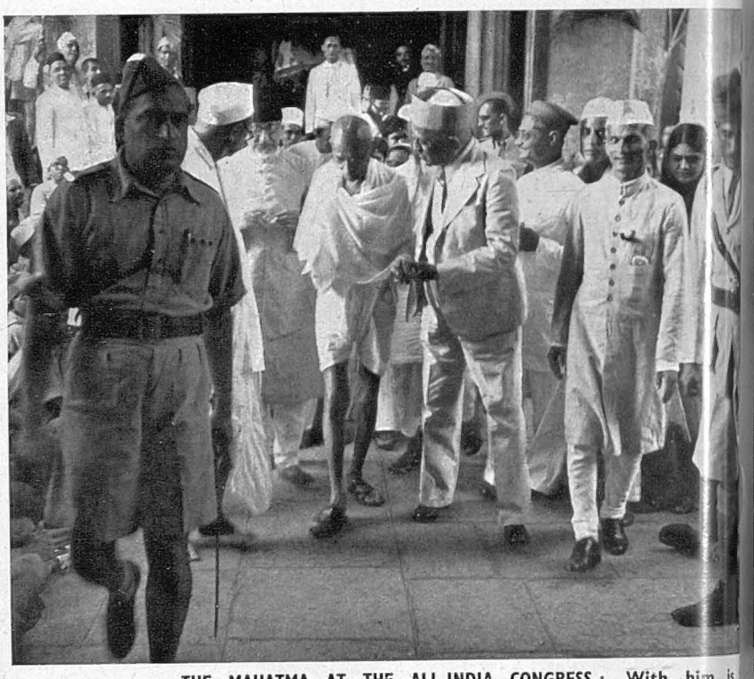
THE great problem of the moment is: What will the Indian leaders do with regard to the Cabinet's proposals? Sir Stafford Cripps has been in India for some weeks, conferring with Congress and with other representatives of political thought. On these pages are reproduced a number of pictures taken during sessions of Congress: they show the type of members with whom Sir Stafford has been negotiating



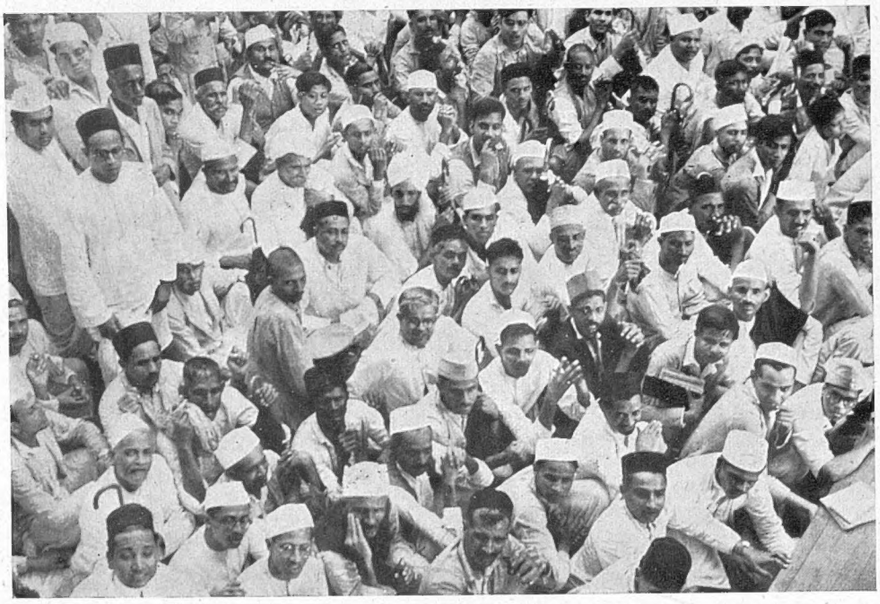
**THE LEADERS OF THE INDIAN NATIONAL MOVEMENT: Reclining, second from left, Pandit Jawaharlal Nehru, leader of the Congress Party; in the foreground is Mahatma Gandhi, founder and inspirer of the modern Nationalist movement in India**



**PANDIT GOVIND VALLAB PANT (on left), former Premier of the United Provinces, and Sardar Vallabhai Patel, Chairman of the Congress Parliamentary Board, in close colloquy during a session of the Indian National Congress**

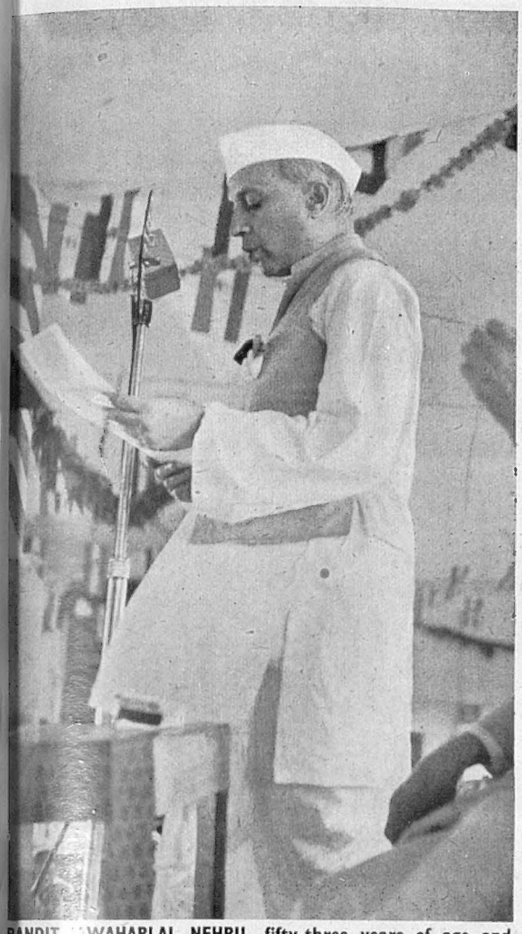


**THE MAHATMA AT THE ALL-INDIA CONGRESS: With him is the Mayor of Bombay. Gandhi is garbed in his usual attire—cloth and shawl**



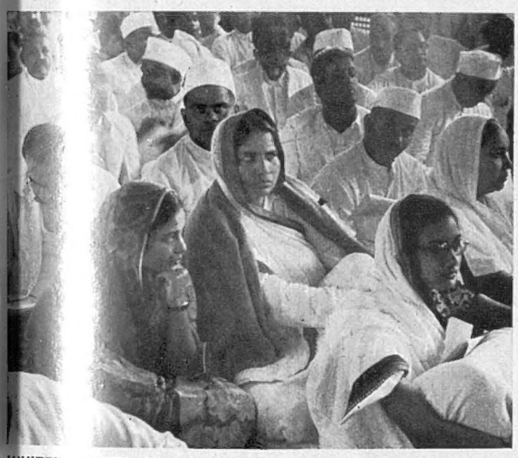
**VISITORS IN THE HALL OF CONGRESS DURING A DEBATE: The black caps are worn by Government officials: These are not allowed to be members of a political party. The White caps are known as "Gandhi caps," and the big business offices discourage their use by their employees**

**HOW MR. GANDHI TRAVELS: This is the Mahatma's luggage. At left is the inevitable Thermos flask which contains goat's milk. The bag filled with cotton and parts of a wooden spinning-wheel is the Mahatma's inseparable companion on his journeyings**

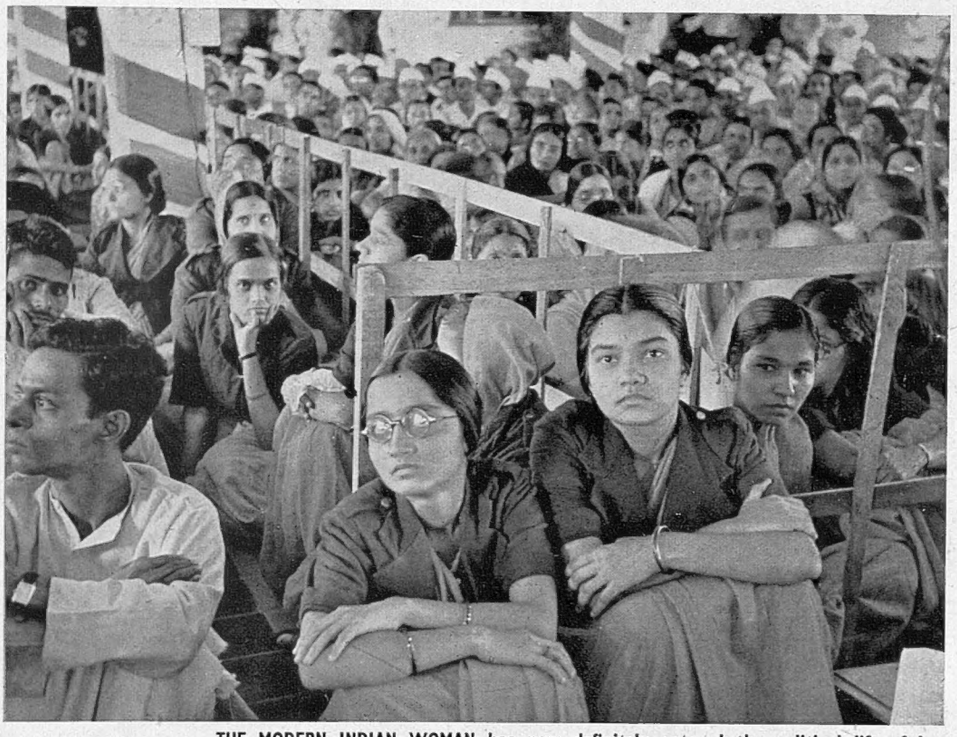


PANDIT JAWAHARLAL NEHRU, fifty-three years of age and educated at Harrow and Cambridge, is the second most important political figure in India. It is with him and with Mr. Gandhi, that Sir Stafford Cripps has been conferring

TAKEN DURING THE COURSE OF A COMMUNIST MEETING: A scene at the All-India Congress, many of the members of which support extreme political views. In 1932, Pandit Nehru declared to Gandhi his own definite adoption of the Communist creed



INVITED GUESTS OF CONGRESS, amongst whom are a number of women who are playing a greater and greater part in modern Indian political life



THE MODERN INDIAN WOMAN has now definitely entered the political life of her country, and many of the younger generation are firm supporters of Congress policy and take the keenest interest in modern political affairs

THE EFFECT OF GANDHI ON THE POPULACE: Many of the Hindus have been waiting for four hours, just to catch a glimpse of the Holy Man who has been an inspiration to the whole nation

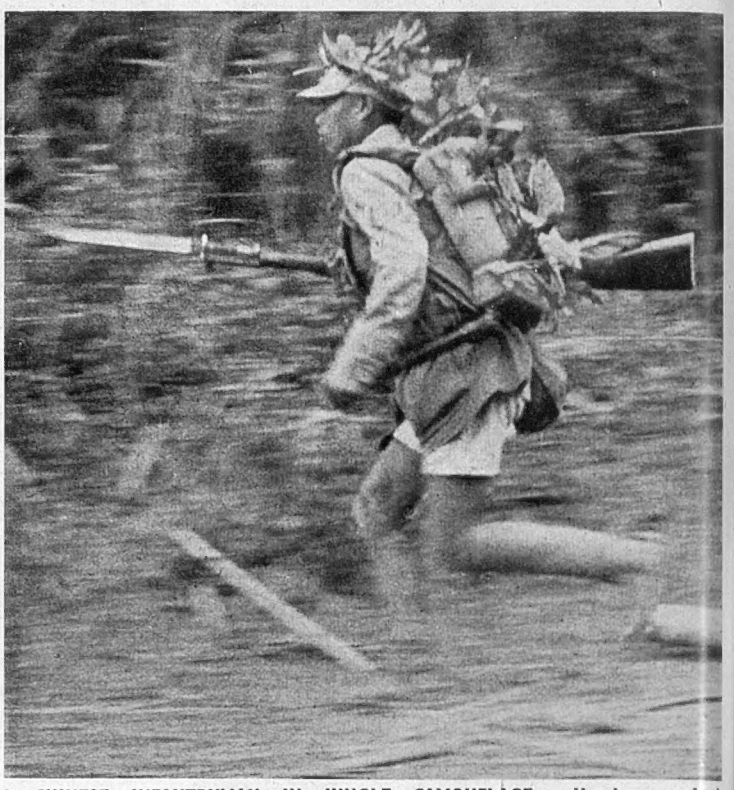
GIRL VOLUNTEERS OF CONGRESS: Young Indian women, who act as stewards at the political sessions, in their uniform dress. Here they are seeing off the Congress members at the railway station at the end of the sessions

# THE CHINESE FIGHT IN BURMA

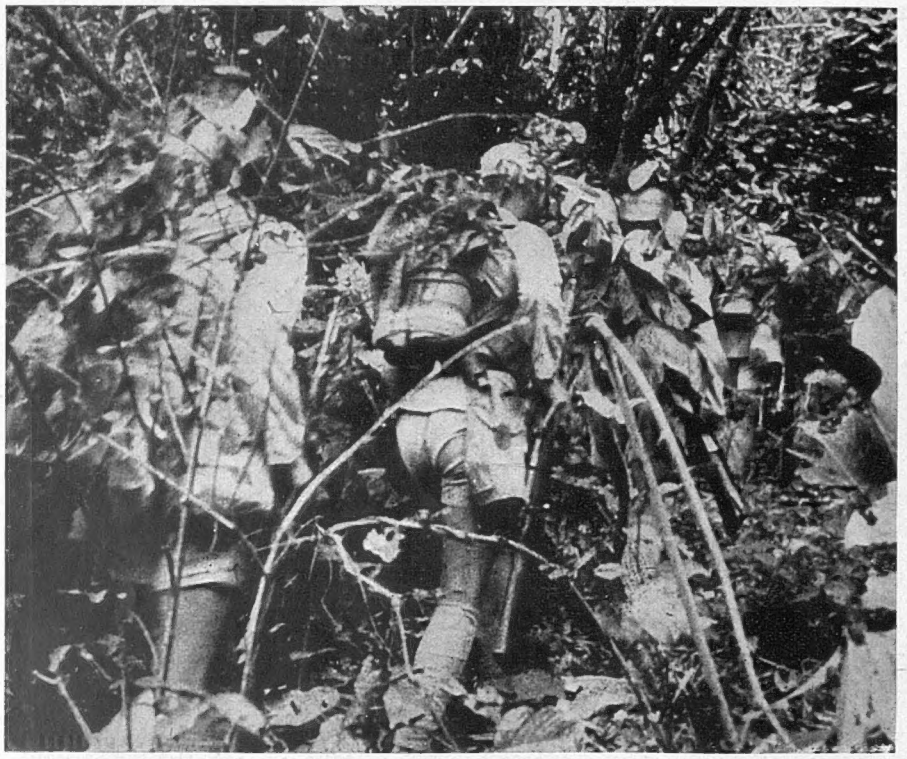
## Where they are now in Action in Company with British Forces

*—A Series of Pictures Taken for the British Newsreels*

**BRITISH AND CHINESE GENERALS MEET IN BURMA:** Lieut.-General T. J. Hutton (until recently G.O.C.), with a member of his staff, discussing operations with General Liu Kwan-Loong. Chinese and British are now working together against the Japs



**A CHINESE INFANTRYMAN IN JUNGLE CAMOUFLAGE:** He has pushed branches of foliage through the webbing of his equipment, and is running through the undergrowth by the roadside



**PREPARING FOR A SURPRISE ATTACK IN THE JUNGLE:** These infantrymen, camouflaged with foliage on head and shoulders, can slip almost invisibly through the Burmese jungle

**EQUIPPED FOR WARFARE UNDER TROPICAL CONDITIONS:** Many of these soldiers are mere youths—very agile and hardy, and all are suitably equipped in shorts and carry light packs, for jungle warfare

**CHINESE SOLDIERS,** halting in a Burmese border village, purchase food, fruit and vegetables. In this part of the country, unlike the southern areas, the Burmese are still loyal and friendly

**CHINESE TROOPS ENTER A BURMESE VILLAGE:** After five years of continuous fighting against the Japs, many of these troops are already veterans, despite their youth. They have again been demonstrating their courage and endurance in the Burmese jungle

"THE GERMAN FLEET LEAVES BREST, steaming ahead to an unknown destination. The crews were not told until late what was their task. Then the orders came: 'The Fleet is to break through the Channel. Form the Line'"

ONE OF THE ESCAPING BATTLESHIPS: The curiously shaped bows of the "Scharnhorst," whose speed is believed to be over 29 knots—very useful during a passage up-Channel!

HOW THE DASH HOME TO GERMANY BEGAN: The battleships "Scharnhorst" and "Gneisenau" and the heavy cruiser "Prinz Eugen" leave harbour at Brest, protected by numerous destroyers and other warships

"THE BRITISH PILOTS ATTACKED WITH A GREAT DASH AND COURAGE. But they encountered heavy odds: the Germans were protected by an umbrella of hundreds of fighters. The British pierced it: then came the direct fire from the ships' artillery. The picture shows the guns of the German cruiser *Prinz Eugen* in action"

## The ESCAPE of the GERMAN BATTLESHIPS

### —as seen by the Germans

*A Series of Pictures which come from an Enemy Source, and which show Scenes During the Passage Up-Channel of the Warships Fleeing from Brest*

*On left*—"FOR A LONG TIME THE WEATHER CONDITIONS OFFERED GOOD PROTECTION to the German ships, which sailed unnoticed for a great many miles. Finally they were detected. The picture shows the moment of aerial attack carried out by the British planes of the Coastal Command"

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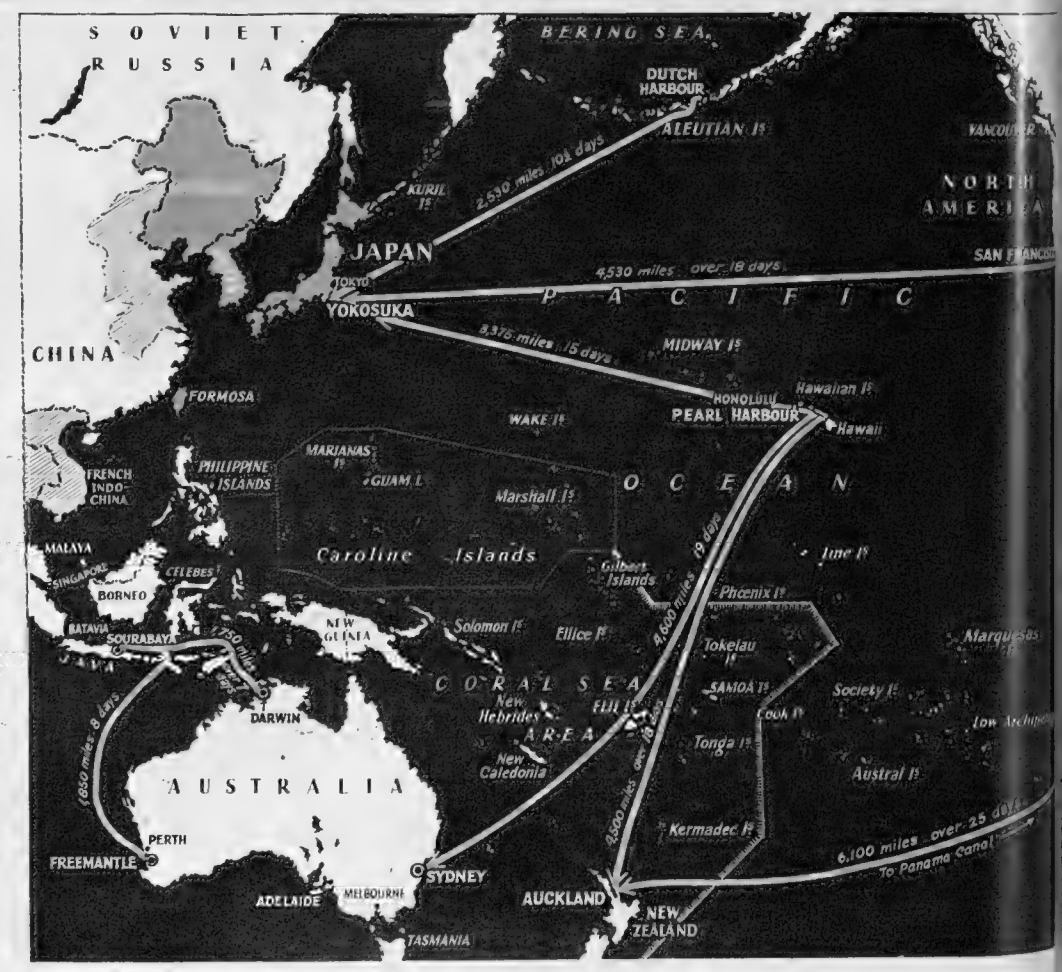
**WHERE AN ATTACK BY THE JAPANESE MAY DEVELOP: The vast open spaces of Western Australia—a long, long coastline and a sparsely populated territory—*Special* Sphere *Map***

Although many hundreds of miles separate the coast of Western Australia from the African and Indian mainlands, it has been realised that control of this seaboard would enable the Japanese to establish a temporary mastery over the eastern half of the Indian Ocean, completing the dominance she is already able to exercise in the Bay of Bengal by the occupation of the Burmese coast and the Andaman Islands. It might also be the prelude to attempts on Ceylon and Madagascar. The towns of Broome and Wyndham have already been subjected to bombing attacks, usually the prelude to an assault. The map of this vast region given above stresses certain peculiarities of this land of great open, sandy deserts and sparse population. Distances here are immense, military or naval objectives—apart from the naval and shipping facilities offered by Perth and Fremantle in the extreme south-west of the Continent—are scarce. But separating Western Australia from the more populous regions of the east are only a thousand miles of sand: only one railway line—that connecting Perth with Adelaide—could bring up reinforcements overland, although, of course, a good deal of supplies could come by sea. Along the coast appear a number of towns and harbours: apart from Geraldton, Broome and Wyndham, however, these are often little more than names on the map! Behind them begin the great sand deserts, which stretch out into the heart of the Continent and which contain little water and no food. If the Japanese were to invade this territory it would only be to secure naval and air bases: no army could trek into the interior! One of the interesting features of Western Australia is its line of rabbit-proof fences, the principal of which runs from the south coast up to Shelborough—a distance of one thousand miles; subsidiary fences have been built from Wiluna to Northampton and southwards. The whole of the coastal area is swept every so often by the willie-willies—great tornadoes which destroy whole villages and townships every season




# The THREAT to WESTERN AUSTRALIA and the MOVE to the INDIAN OCEAN

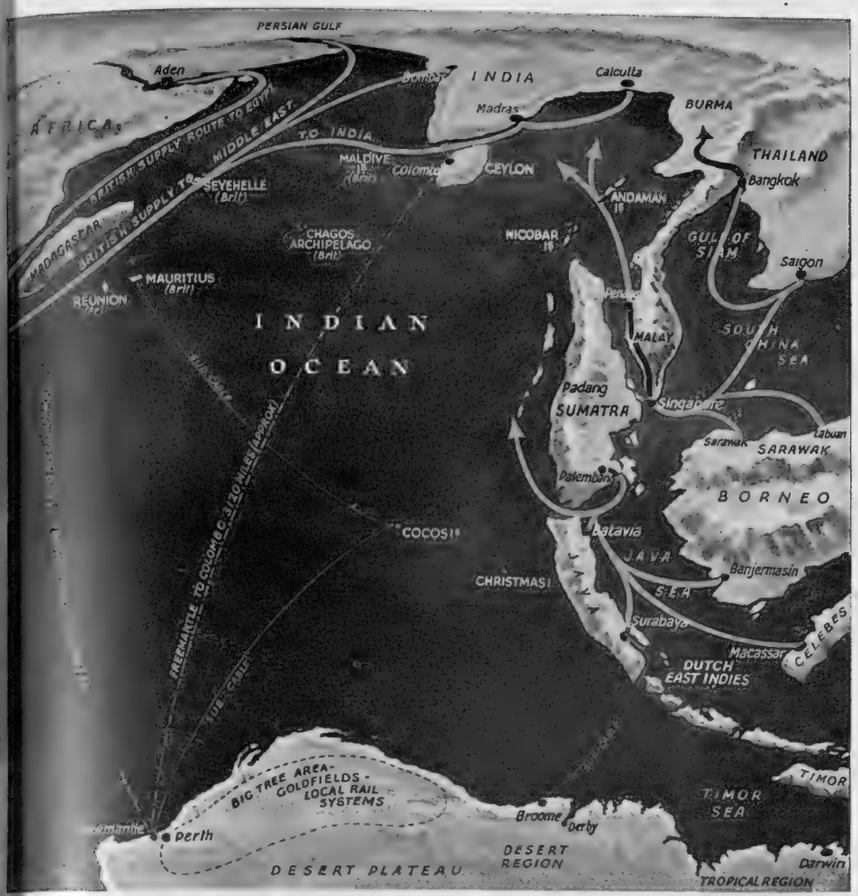
## Two New Danger Spots in the Japanese War

—*Special* Sphere *Maps and Diagrams*

**SUPREME COMMANDER IN AUSTRALIA: General MacArthur, the U.S. defender of the Philippines, who is now in command in the South-West Pacific**

*Below*—**THE SOUTH-WEST PACIFIC AS THE SCENE**—*Special* Sphere *Map*

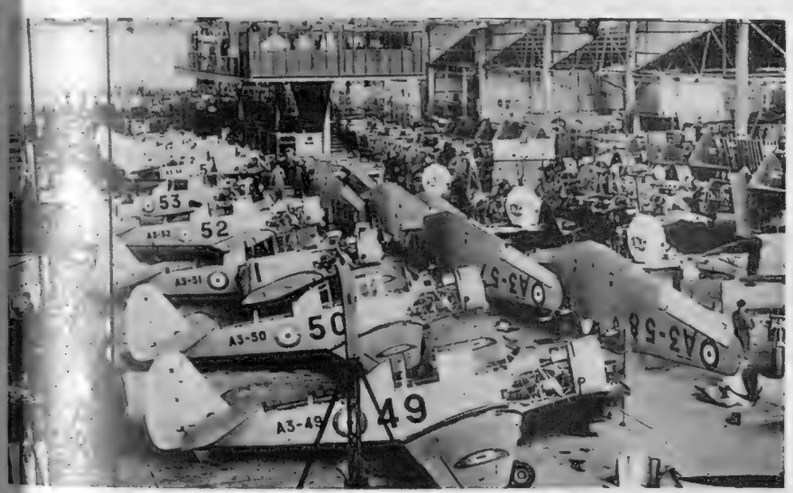
All routes seem to point to Australia. On the north and north-east the islands leading down to the South Continent are all occupied by the Japanese and now they are threatening the south-east of the Solomon Group. New Guinea, with its capital at Port Moresby, is, however, still proving a stumbling-block to Jap aspirations. But—viewed from the Australian angle—the present state of affairs cannot be regarded as too good, although with growing Australian-American strength the enemy has several tough nuts to crack before he can begin to regard victory as in sight. So far the approach to Australia has cost him very dear—and he has only just begun to come up against Australasian defences!




**AS AUSTRALIA VIEWS THE POSITION IN THE INDIAN OCEAN : With the Western coast of Australia (below) as a possible jumping-off ground for advances against Madagascar and Ceylon**—*Drawing by E. G. Lambert*

**THE AUSTRALIAN PRIME MINISTER, MR. JOHN CURTIN :** On the right is Mr. Frank Beaurepaire, Lord Mayor of Melbourne, and on the left Mr. Makin, the Australian Navy Minister. This picture was taken at the opening of the new H.M.A.S. *Sydney* Fund at the Melbourne Town Hall

The big map of Western Australia given on the opposite page should be read in conjunction with the picture map of the Indian Ocean on the left. At the bottom of the view is the Australian coast, from Perth to Broome, looking towards the big island of Madagascar and the South African coast, and also towards Ceylon and India. All the territory to the north—Borneo, Java, Sumatra, etc.—is now in Japanese hands; as is also the whole of the Malay peninsula, a large portion of Burma, and the Andaman Islands. The eastern portion of the Indian Ocean is thus dominated completely: were an invasion of the Western Australian coast to prove successful, the Japs would have a further dominance over the Indian Ocean, and would then be in a strong position to develop their drive to the westwards.




**PRODUCTION IS IN FULL SWING IN AUSTRALIA FOR THE WAR EFFORT : Australian-built [illegible] designed trainer aircraft on the left; Wirraway aircraft on the right**

**THE JAPANESE ENCIRCLE THE NORTH-EASTERN APPROACHES TO AUSTRALIA**—*Drawing by W. Brownlee*

After the Japanese landing at Lae, in New Guinea, a further movement towards the east was made by a landing at Buka, the most northerly of the Solomon Islands Group. This, it should be observed, gives evidence of an encircling movement around the north-easterly approaches to Australia. The Solomons, with Santa Cruz, New Hebrides and New Caledonia, form a crescent of islands which would materially assist attack on the populous eastern side of the Coral Sea. Buka, in the Solomons, was under German control until the Great War (1914-18), when it passed with Papua and Northern New Guinea under Australian mandatory control. The group is of volcanic origin, a double string of islands extending in a line N.W. to S.E. Bougainville is the largest island

**THE COUNTRY WHICH HAS BEATEN THE JAPANESE :** This picture shows the great central range of mountains in Inner New Guinea, where the peaks rise to 13,000 ft. After the heavy battering of the Jap Invasion fleet at Lae, on the north side of the island, the enemy attempted to advance on Port Moresby, on the south side, by land. Their efforts have been beaten by the country and the weather, however, heavy floods having compelled them to turn back to their base at Lae

# THE WAR IN THE AIR On Many Battlefronts

**A "PARENT SHIP" FOR FLYING-BOATS: Operating from a bay in West Africa, a fleet of Sunderlands of the R.A.F. use a small converted liner as ba and as floating home. Thus the squadron is a self-contained unit, which can operate without ever going ashore**—*Drawing by Roland Davies*

A ship at anchor in a West African bay. A mile away, moored at their red buoys, a line Sunderland flying-boats. A power-boat speeds from the ship to a rough wooden jetty the strip of sandy beach. Behind is a row of palm-trees. A flying-boat, just returning fr patrol, settles on the water with a dignified wake, as a native in a small motor-boat races out prepare the buoy. That is the scene where one of the most famous flying-boat squadrons of t Royal Air Force now operates. The tasks given to them are still scattered and varied, b their principal job now is to guard the shipping routes in the Atlantic. The squadron is su a self-contained unit that, except for repairs, it can operate without ever going ashore. Everyth that the squadron needs is housed in the mother-ship, a small converted liner, which is a the home of the officers and the men. When the squadron moves from one battle-zone to anoth as, for instance, when it moved to West Africa, the flying-boats go ahead with their operation crews. Soon afterwards, along comes the mother-ship, and the squadron is operational agai

**THE R.A.F. IN ACTION OVER BURMA: Carrying out a smashing attack on Mingladon airfield, held by the Japs a few miles to the north of Rangoon**—*Drawing by Roland Davies*

**TWO EXTREMES IN TARGETS: or, Targets—good and bad**—*Drawings by Roland Davies*

Much controversy is now in progress as to what is a suitable target for R.A.F. bombers. It must obvious that a target such as that on the right is far more easy to destroy than that on the le if a bomb were to hit the large area implied in an ammunition dump, the subsequent explos would of themselves destroy everything. The bridge on the left, however, not only presents bomber with a narrow line as his target, but the bridge has been built with a "factor of safet of five to six—so that any damage caused will be purely local and capable of quick temporary rep

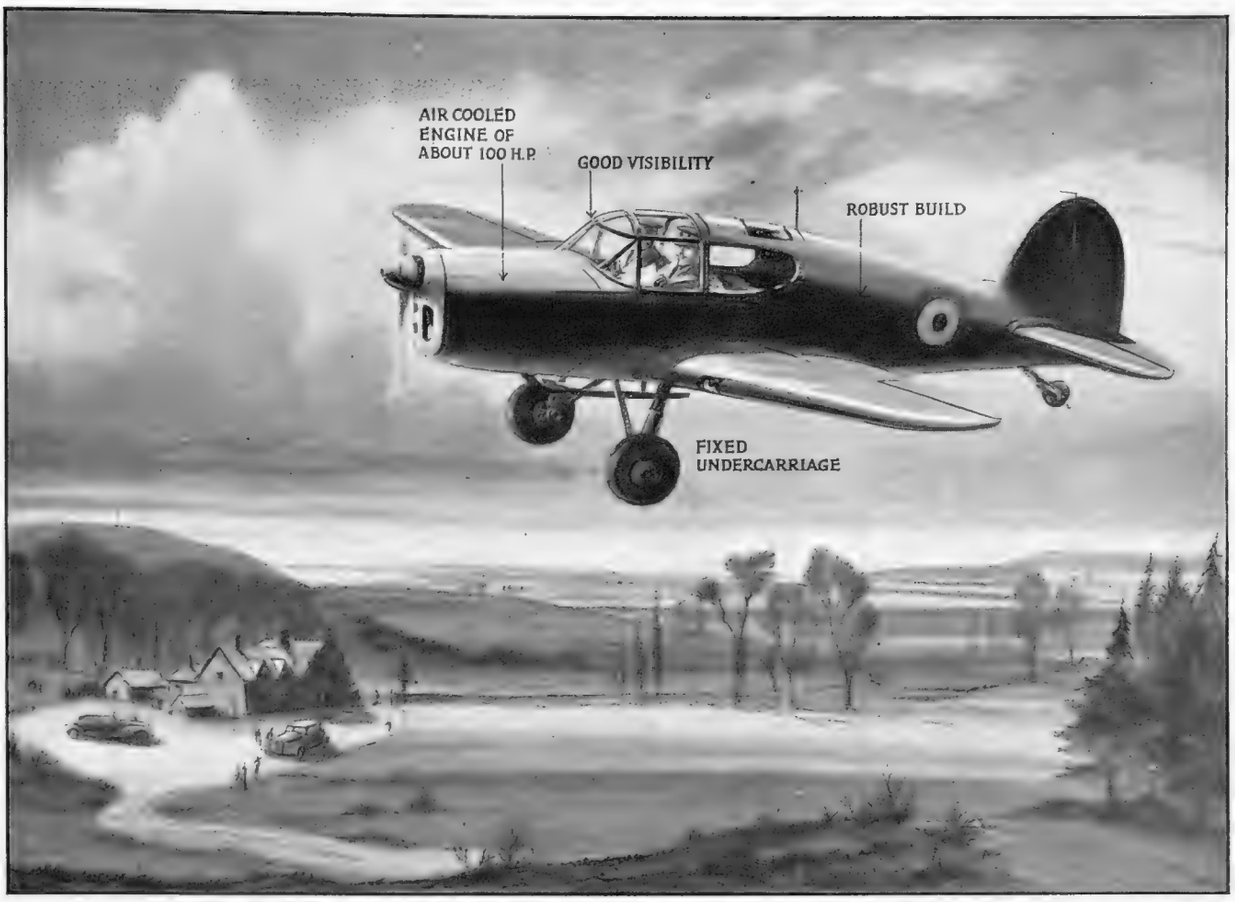
*On left*—It would seem that the war in the air over Burma has developed into a ding-dong aff the R.A.F. have been busy strafing enemy-held airfields, and the Japs have been equally busy adapt new ones as they have advanced within the former British zones. The picture by Mr. Davies on t left illustrates a heavy raid carried out by our pilots at Mingladon. In this, ten Japanese aircraft w destroyed—one Navy O was shot down in flames, and an Army 97 fell to pieces in the air. O fighters also engaged the enemy fighters and brought down another Army 97: they then machi gunned the aerodrome, destroying one Japanese bomber and two fighters on the ground. One of o fighters crashed, but the pilot was able to bale out. In the picture the attack is shown in progr

*On right*—"Speed of movement in war must not be confined only to battle forces; it must apply in still greater measure to those who plan and direct the battles," wrote Mr. Peter Masefield in a recent article. "For instance, the need for personal contact between corps commanders and their divisional commanders and by them with their brigadiers is of primary importance.

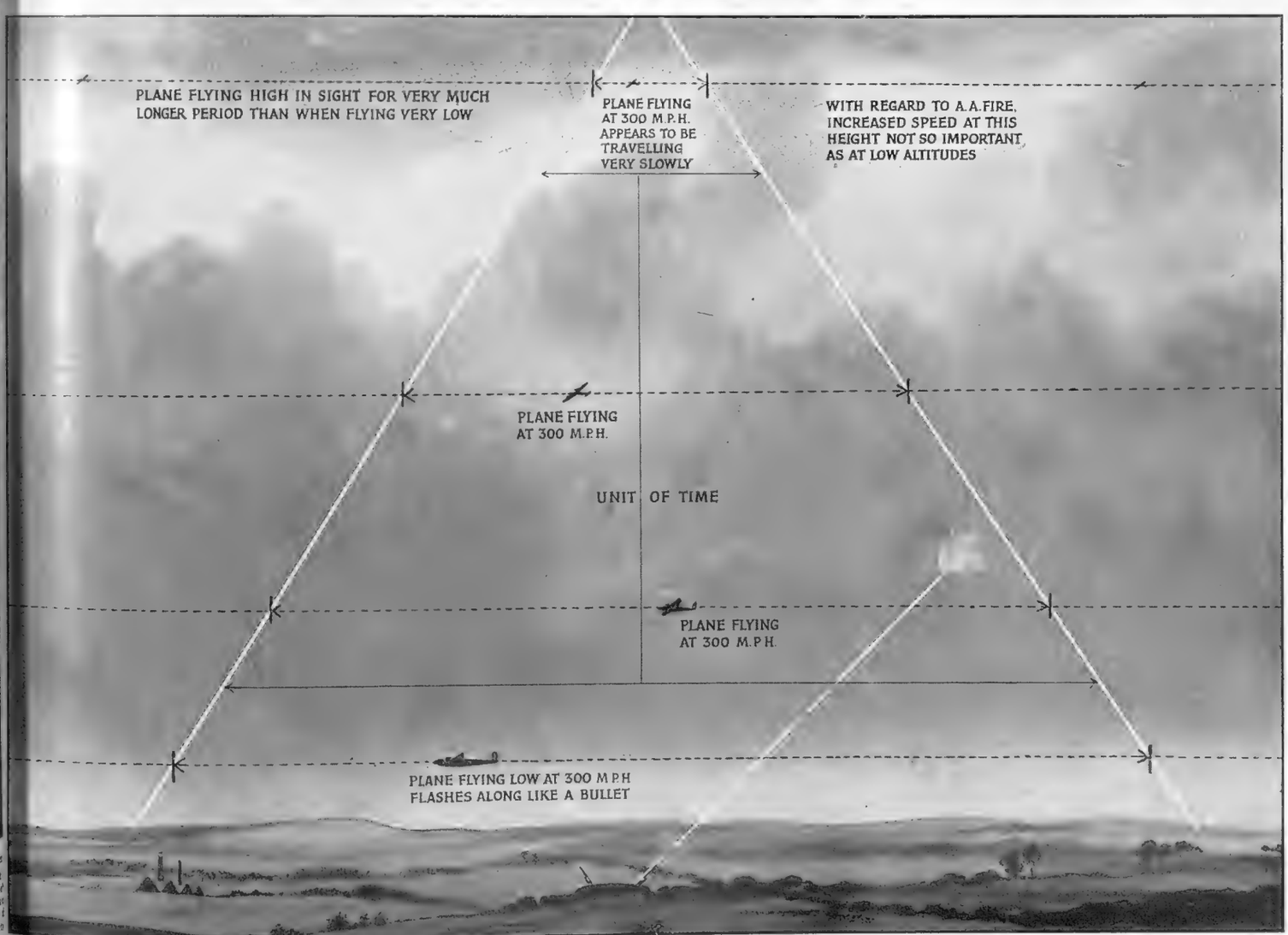
"At present the general is road-bound. Obviously the use of a highly trained R.A.F. crew and a powerful military aeroplane for such work is wasteful. What is wanted is something altogether different—a small light aeroplane in which the emphasis is on take-off and angle of climb rather than on top speed or fighting power.

"One further use for such a specialised light aeroplane is as an air observation post for spotting with artillery at short range. The Army has used the 90-h.p. Taylorcraft for such work, and it has given excellent service. Yet a still more robust type is probably needed to stand up to continual landings and take-offs on rough ground such as will be normal with operational work.

"These purposes call for an aeroplane which is capable of taking-off from anywhere, including small fields and roads; can be flown easily by Army officers without long training; must have a good all-round view—in fact, be the nearest possible approach to a flying goldfish-bowl; can be transported easily with wings folded; is easy to maintain in the field; and does not interfere with present production programmes"

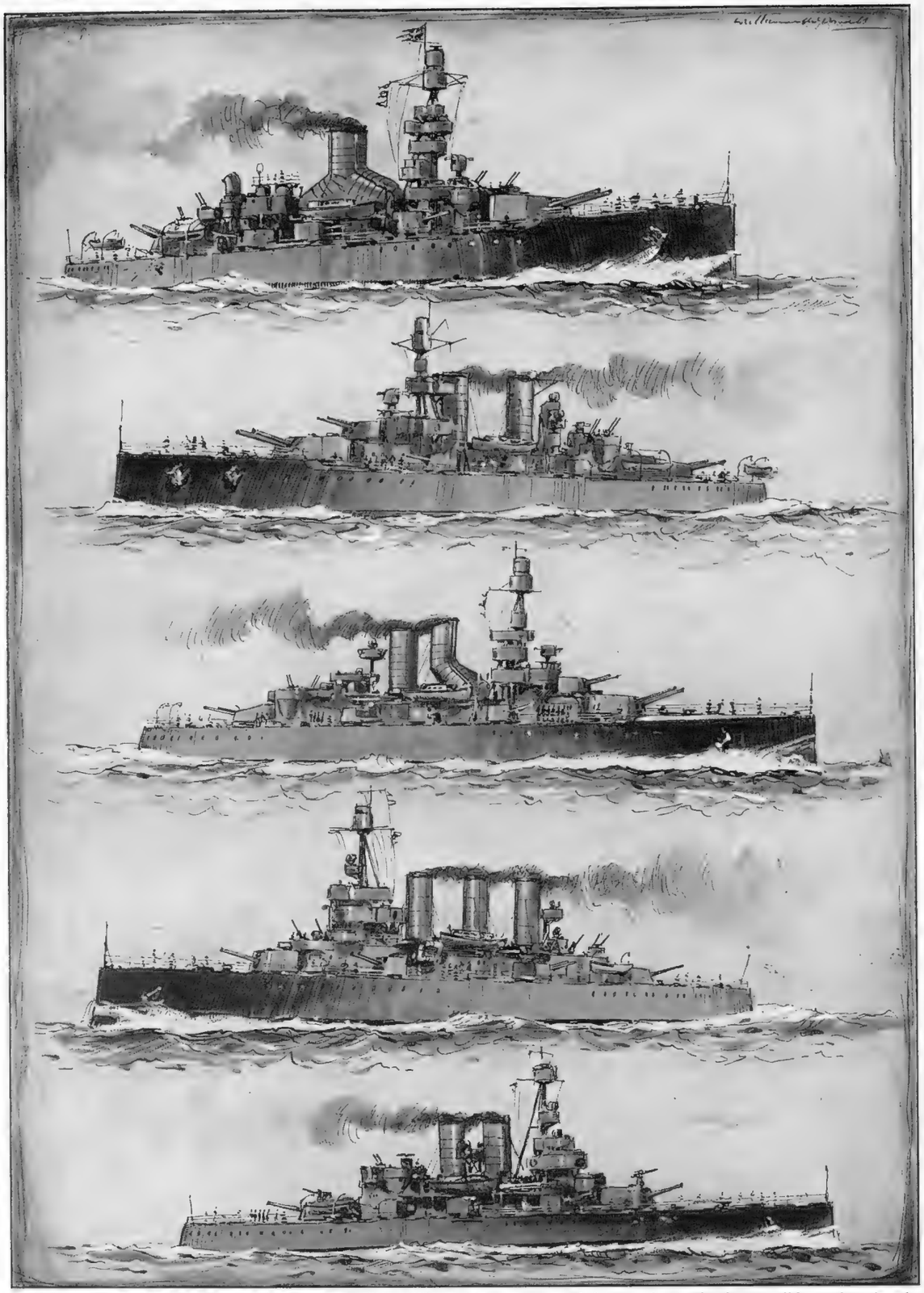



**THERE HAS BEEN A DEMAND FOR AN AIRCRAFT WHICH COULD SERVE AS THE "WINGS AND THE EYES" OF THE ARMY, and as a "contact" plane for Army commanders. This is our suggestion for such an aeroplane, the need for which has been brought about by the new conditions of extended warfare**—*Drawing by Roland Davies*




**WHY HIGH-SPEED BOMBERS ARE NECESSARY IF CASUALTIES ARE TO BE KEPT LOW: Greater speed is necessary in order to counter anti-aircraft fire if attacks are to be made from comparatively lower levels**—*Drawing by Roland Davies*

At great heights, it would seem that higher speeds are not so important for bombing aircraft—height itself being a considerable deterrent to A.-A. gunfire. Elaborate calculations have to be made by predictor, and fuse settings carefully adjusted, despite that the plane remains in sight for a considerable period. When it comes to lower levels, however, a fast-flying aircraft is essential, else the A.-A. shells can get the range and speed and then wreak considerable havoc. The ideal, of course, is a very fast bomber flying very low: it then whizzes over the heads of the gunners like a bullet and gives them hardly a moment to sight their guns and fire their shells. But, equally, the bomber's aim would have to be unerring, as his target would only come into view for a few seconds, and there could be no question of a proper "run up" to it, as is the case in high-level attacks



**SOME OF THE POWERFUL VESSELS OF THE SWEDISH NAVY, which are now being made ready for possible action in the Baltic**—*Drawing by Wm. McDowell*

It is significant to record that in the Swedish Navy those vessels which we should designate "battleships" are actually described as "coast-defence vessels," thus indicating the pacific ideas with which Scandinavia has been imbued within recent years! Working downwards from the top of this drawing are the three vessels *Gustaf V*, *Drottning Victoria* and *Sverige*: these are of 7,275 tons, 7,120 tons and 7,080 tons respectively. Each battleship carries four 11-in. and six 6-in. guns, as well as sixteen other anti-aircraft weapons of various sizes. The 11-in. guns, it may be added, can be loaded in 17 seconds! The *Gustaf V*, launched in January 1918, was modernised in 1936-37 (after a previous reconstruction in 1929-30); *Drottning Victoria*, launched in September 1917, was refitted in 1927 and reconstructed in 1934-35; whilst *Sverige*, launched in May 1915, was taken in hand for modernisation in 1938 and completed in 1940. The two lower vessels in the above drawing are *Oscar II* (upper) and *Aran* (lower). The former dates back to 1905, but she was due for a refit in 1939, which, presumably, has now been carried out: she is a vessel of 4,320 tons, with a complement of 339. Her armament consists of 8·3-in., and 6-in. guns, as well as smaller guns. The *Aran* is one of a class of four coast-defence ships, of which three were launched in 1901 and one in 1903: all are of 3,415 tons displacement and carry complements of 301. The armament is similar to that of *Oscar II*

# Sweden is Preparing for Action

## *Hitler's Threats Point to Coming Events in Scandinavia; and the Swedish Navy is Being Made Ready for Eventualities in the Baltic*

By A. J. McWHINNIE

As the prospect of heavy naval engagements off the Norwegian coast draws closer to Sweden, so Sweden, hugging her neutrality, goes on quietly increasing her naval resources.

Since the beginning of the war, Sweden, still at peace, has been adding to her Navy about seventy ships of an aggregate tonnage of 33,000, built or laid down. They include a number, undisclosed, of submarines, a new class of destroyer about which no details have been furnished, as well as numerous mine-layers and motor torpedo-boats.

Sweden pays great attention to mining in her Navy. Submarines are not the only craft equipped for mine-laying. The Royal Swedish Navy suffered a loss when a torpedo explosion blew up three modern destroyers at the naval base outside Stockholm in September last year. Within a few weeks it was announced that they were to be replaced.

To-day, the Swedish Navy is greater than it has been for years. Here are details which I have just obtained from an authoritative source; details up to the end of 1941. The Royal Swedish Navy to-day consists of:

Three "battleships"—artillery ships of 7,000 tons, mounting 11-in. guns.

Four old artillery ships (pre-1914), mounting 8·5-in. guns.

One old cruiser (6-in. guns).

One aircraft-carrier, cruiser type.

Two cruisers building, one of which may be completed.

Seventeen destroyers.

Four destroyers building.

Nine torpedo-boats (six more building).

Twenty-one submarines (seven more building).

And many more smaller craft, old, modern and building—minesweepers, tenders, depot ships, ice-breakers, corvette-type craft, M.T.B.s and patrol vessels.

This is how the Swedish Government over the past few years has been realising the necessity for increasing her Navy.

The Navy Estimates for 1937-38 were 38,000,000 kronor. The following year the estimate had increased to 49,364,000 kronor. And the estimate for 1939-40 was up to 70,000,000 kronor. The personnel of the Royal Swedish Navy in the last-announced figure (more than a year ago) was 5,500 officers and men. It is more now. The total for reserves cannot be estimated, as it is dependent on conscription. But it includes 700 officers.

The two new Swedish cruisers, of which, as I have revealed, one is probably completed by now, should be interesting to those watching the world tendencies in warship-borne aircraft. *Gotland*, the 4,775-ton Swedish cruiser completed in 1933, was the first cruiser designed to act as a cruiser-aircraft-carrier. She represents a well-conceived and exceedingly useful type of warship, carrying eight Hawker-Osprey planes, with space to stow eleven.

Each plane is mounted on a launching trolley, which can be driven by its own motor on to a catapult and connected up to launching mechanism. By this system aircraft can be launched at intervals of two minutes. The catapult is of the compressed-air type. She is fitted for mine-laying and carries six 21-in. torpedoes. Her complement is 480, her speed about 28 knots.

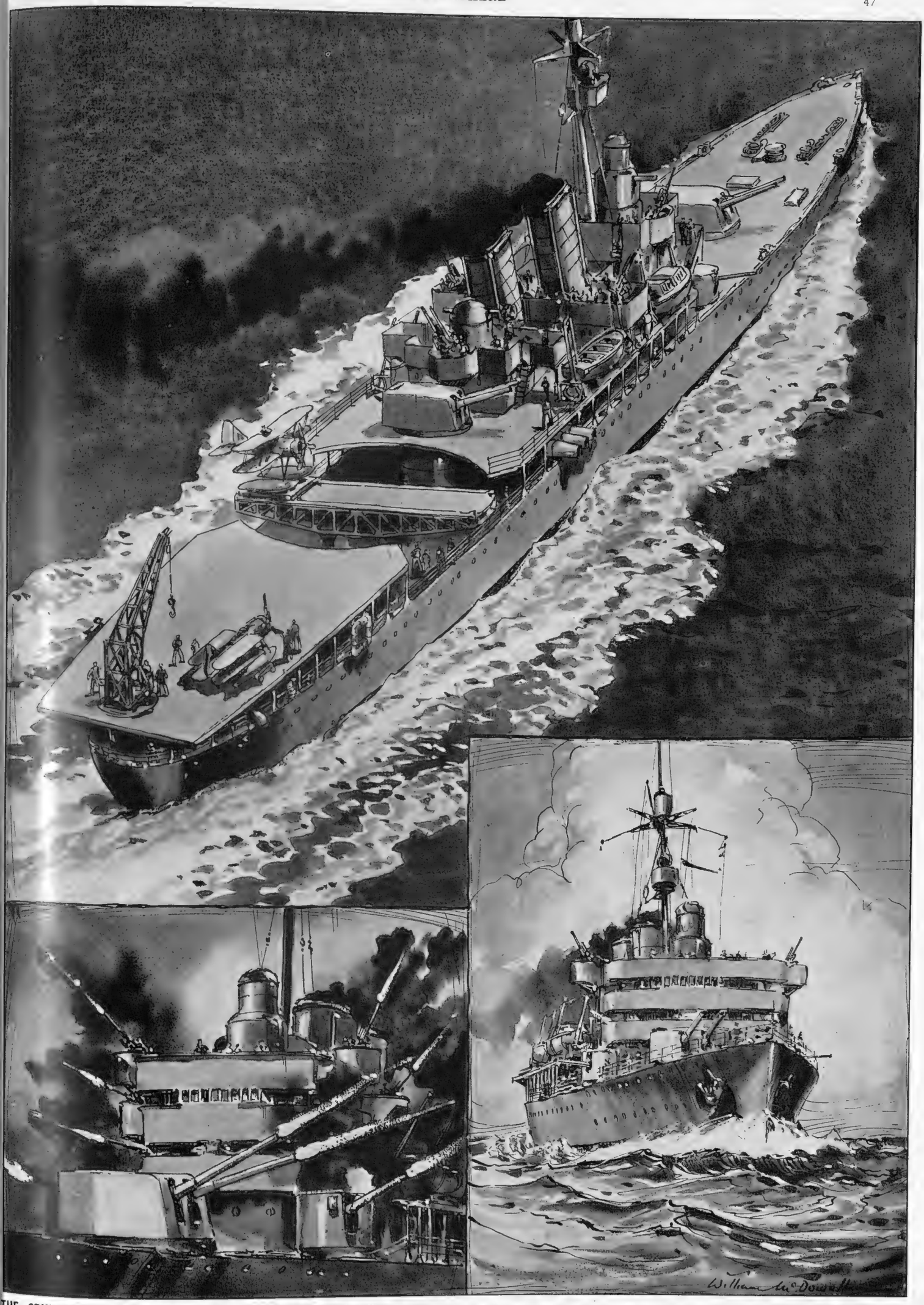
The guns of the Royal Swedish Navy are the famous Bofors guns. The guns of the *Gotland* are six 6-in., four 3-in. A.-A. and four 25 mm. A.-A., with four machine-guns.

Presumably, the two new cruisers will be a development of the eight-year-old *Gotland*, whose design may well lead the way to further development along the lines of having an efficient, small, fast aircraft-carrier or cruiser type.

Of the Swedish coast-defence vessels, whose tonnage ranges between 3,500 and about 8,000 tons, the heavier ships, like the *Sverige*, the *Drottning Victoria* and the *Gustav V* are rated as "battleships," each carrying a complement of 450. Their speed is about 23 knots. They were built in 1915, 1917 and 1918, like other coastal-defence ships, or artillery ships, many years older, have had extensive refits. The speed of the newest class of destroyers is in the region of 40 knots.

Sweden's Navy may not be an outstanding fleet like those of the greater Powers, but, all these months since the invasion of Norway, it cannot be doubted that, while Sweden walked her neutrality tight-rope, Hitler, casting greedy eyes on Sweden, has thought, too, of her fighting ships and her mercantile marine.

*On right*—The *Gotland* of the Swedish Navy is the first vessel of her type ever to be launched. She was laid down in December 1927, took the water in September 1933, and was completed in December 1934, her cost being £900,000. *Gotland* was designed to act as an aircraft-carrier as well as a cruiser. The drawing by Mr. McDowell on the right shows how the two functions of the vessel have been combined: the forward half bears all the characteristics of the modern cruiser, yet from the stern (as in the larger drawing) she is undoubtedly aircraft-carrier—but with one big difference: aircraft from her deck are not flown off, but catapulted. Each plane, in fact, is mounted on a launching trolley, which can be driven by its own motor on to a catapult. By this system aircraft can be launched at intervals of two minutes. The guns carried are many and powerful, with extremely useful angles of fire (as shown in the bottom left). The 6-in. guns, it should be noted, can be elevated up to the very high angle of 60 deg.; their range is 26,000 yards. The number of aircraft carried is eight, and they are British-built Hawker-Ospreys



THE CRUISER-AIRCRAFT-CARRIER; OR "FLYGPLANKRYSSARE": A VESSEL OF THE SWEDISH NAVY WHICH IS PROBABLY UNIQUE IN THE NAVIES OF THE WORLD—The 4,775-ton "Gotland," which is half cruiser (at her forward end) and half aircraft-carrier (at her stern). She carries a complement of 480—a considerable number in view of her moderate displacement—*Drawings by Wm. McDowell*

THE WAR AT SEA IN THE SOUTH-WEST PACIFIC

# REFUELLING WARSHIPS DURING A NAVAL ACTION

A Destroyer Returns to the Base at Surabaya to Take on Supplies of Fuel Oil during the Great Action In the Java Sea

*—From a drawing by Montague Dawson (done specially for this issue of* The Sphere)

Naval action is prolonged over days, a number of things begin to emerge ause anxiety to the commanders of individual vessels and to the in-Chief. Ammunition may be expended (and in modern warships this in fantastic quantities), or fuel may run dangerously low if many hours taken up in a running engagement. This last factor became very the Battle of the Java Sea, where much steaming was done by the Allied eant that the destroyers' fuel bunkers ran dangerously low : in the case oyer *Encounter*, her gauges showed less than 100 tons, owing particularly racted sweep which had preceded the battle proper. Her captain had iral Doorman for permission to return to Surabaya in order to refuel. ent deprived the cruisers of their last protection, but there was nothing done ! All the other destroyers ran out of torpedoes and they, too, in to Surabaya, where the difficulty of refuelling had grown intense Enemy bombers came over, necessitating hurried disconnection of the oil pipes and a rapid movement out to sea again on the part of the Allied war vessels. In Mr. Dawson's drawing above, a destroyer of the Fearless class (to which *Encounter* belongs) is seen in the act of refuelling from a supply ship near the base at Surabaya, her guns pointing upwards in readiness to repel an expected air attack. The task of getting the pipe fixed and the oil flowing properly is not an easy one, unless the operation takes place in very calm weather.

Vessels of the Fearless and Eclipse classes are of 1,350 to 1,375 tons displacement, and carry a complement of 145. The average speed of which they are capable is 36½ knots, although some are reported to have reached 38 knots : their radius of action is 6,000 miles, but this is at a speed of 15 knots ; when going full out, as in the Battle of the Java Sea, the fuel consumption is so great that this radius becomes greatly reduced. The bunkers have a capacity of 480 tons of oil fuel

# HOW THE JAPANESE USE TORPEDOES

## In Defiance of Recognised International Law

*—Drawings by L. Ashwell Wood*

***On right*—THE THREE METHODS by which the Japs make use of their torpedoes**

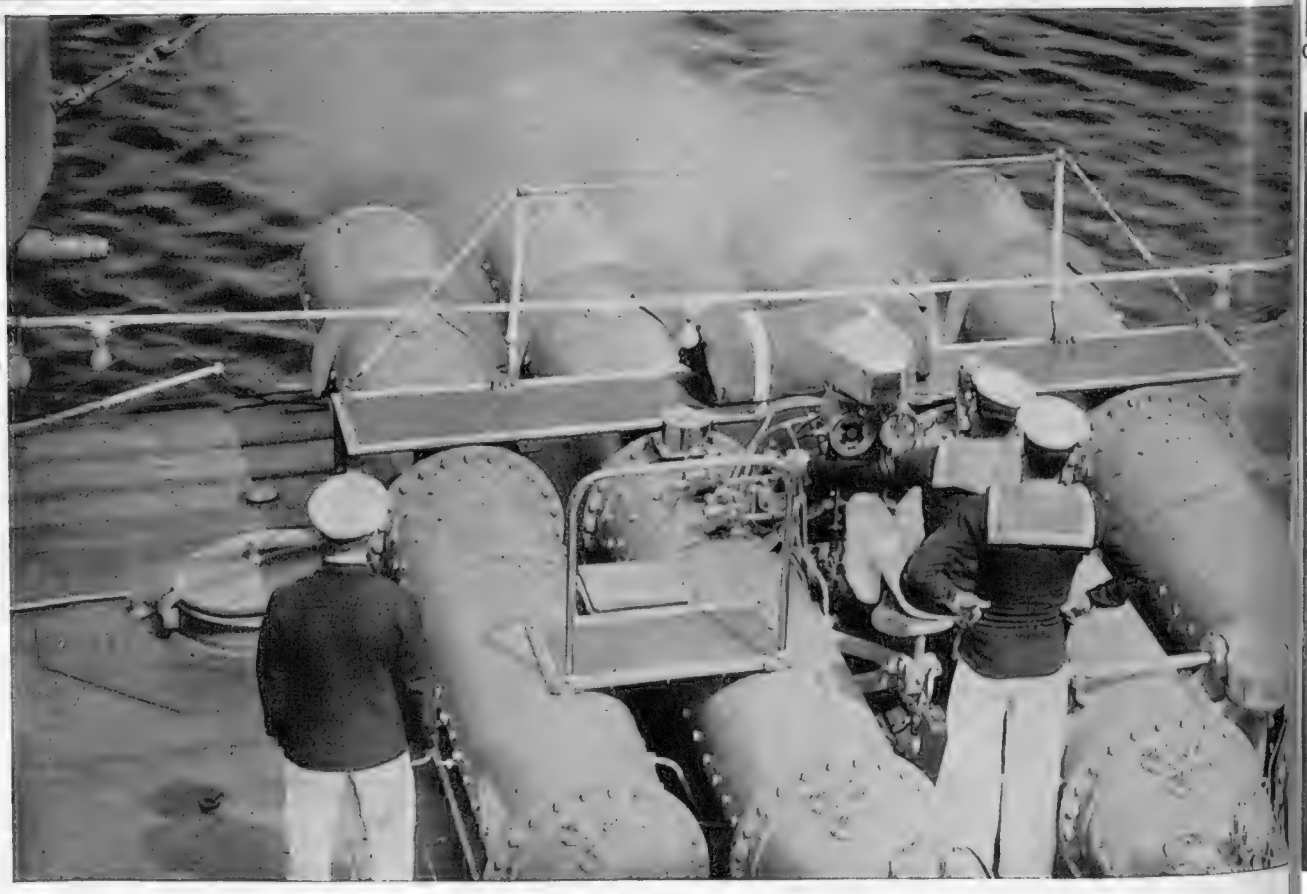
The enemy in the South-West Pacific have been using various devices on their torpedoes to ensure that these costly and deadly missiles are used to the full—despite that, in at least one case, they are disregarding International Law. One type explodes on the termination of its run, or by a pre-determined range-setting: another type is arranged to maintain part of its buoyancy after its run, thereby acting as a mine, with probably more than one detonator. (This is contrary to recognised Law amongst Western nations.) The third is the normal type which explodes when it hits the vessel at which it has been aimed. How many of the "mine-torpedoes" have been left floating about in the Pacific, to wreck peaceful merchantmen, can only be a matter for conjecture!

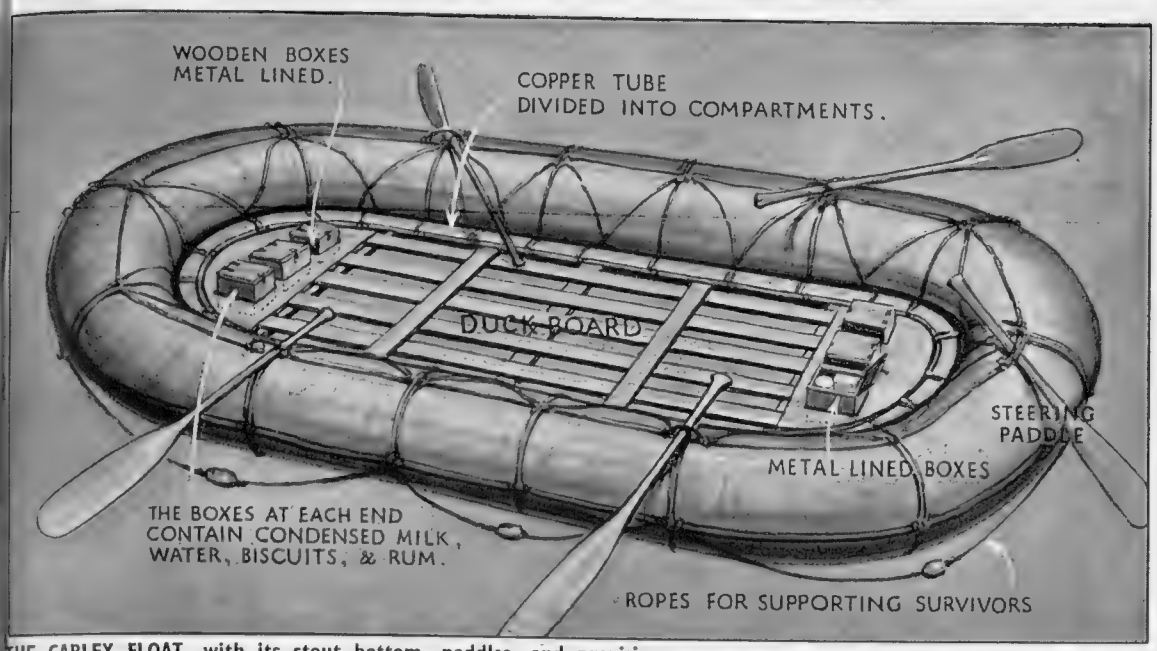
***On left*—THE BRITISH METHOD OF USING TORPEDOES**

Unlike the Japanese, these comply with the requirements of International Law: therefore they are made to sink at the end of their run and are thus no longer a menace to shipping if they have been unexploded on impact with their target. In order to sink the torpedoes the action of the gyroscope on the horizontal rudder plays a part. In the latest naval practice the effective run of a British torpedo is about 10,000 yards, or just under six miles: at the end of this, the engine (having used all its compressed air) ceases running, the chamber becomes flooded, and the whole torpedo sinks to the bottom. It can never rise again, and the sea over which a naval action has been fought no longer holds any danger for subsequent passers-by

***On right*—HOW TORPEDOES ARE FIRED FROM THE DECK OF A BRITISH CRUISER**

The torpedo has played a very considerable part in the present war: not only has it been launched from submarines, but from cruisers and destroyers—with devastating effect; and its employment by aircraft is almost too well known for comment here! In the Great War the efficient range was 7,000 to 10,000 yards for the long-range type, but the best results were secured at close quarters, mainly because the long-range torpedo moved so slowly. To-day, 10,000 yards is still regarded as the effective run, but the torpedoes are more deadly and more precise owing to improvements which have been made since the last war ended. The torpedoes from a submarine are discharged from the bow, the whole vessel being aimed at the target: from the decks of cruisers and destroyers, however, the missiles are launched from the deck-level as illustrated in the picture on the right






**THE CARLEY FLOAT, with its stout bottom, paddles, and provisions in strong containers. Thousands of lives have been saved by these wonderful rafts**

# THE USE OF THE CARLEY FLOAT IN WARTIME

The Carley Floats are shallow, oval-oblong rafts: round the edges runs a large copper tube compartmented so that if a few sections are holed, there is still no great loss of buoyancy. Hand lines and paddles are provided; condensed milk, fresh water, "hard-tack," and rum constitute the provisioning. They are excellent devices for what they are, and they are capable of bearing far greater numbers of men than they were designed for. Even so, a few days spent drifting in such a craft constitutes as severe a test of endurance and character as it is humanly possible to undergo. The Carley Float played a prominent part in the Battle of the Java Sea: they are the main method of providing the crew of a naval vessel with some chance of rescue, where it is not possible to provide the boat accommodation which characterises all modern mercantile ships. Large numbers of them floated off from the sunken Allied ships. In one case, the Dutch destroyer *Kortenaer's* crew were largely rescued from a number of their Carley Floats. Their presence in the darkness was detected by the light from an illuminated lifebelt, with a Holmes light, thrown from the U.S. cruiser

(*Continued below*)

**ON A BRITISH BATTLESHIP, Floats are placed in every suitable position from which they can float off when necessary**

**HOW CARLEY FLOATS ARE LASHED between the aircraft hangars on a British cruiser**

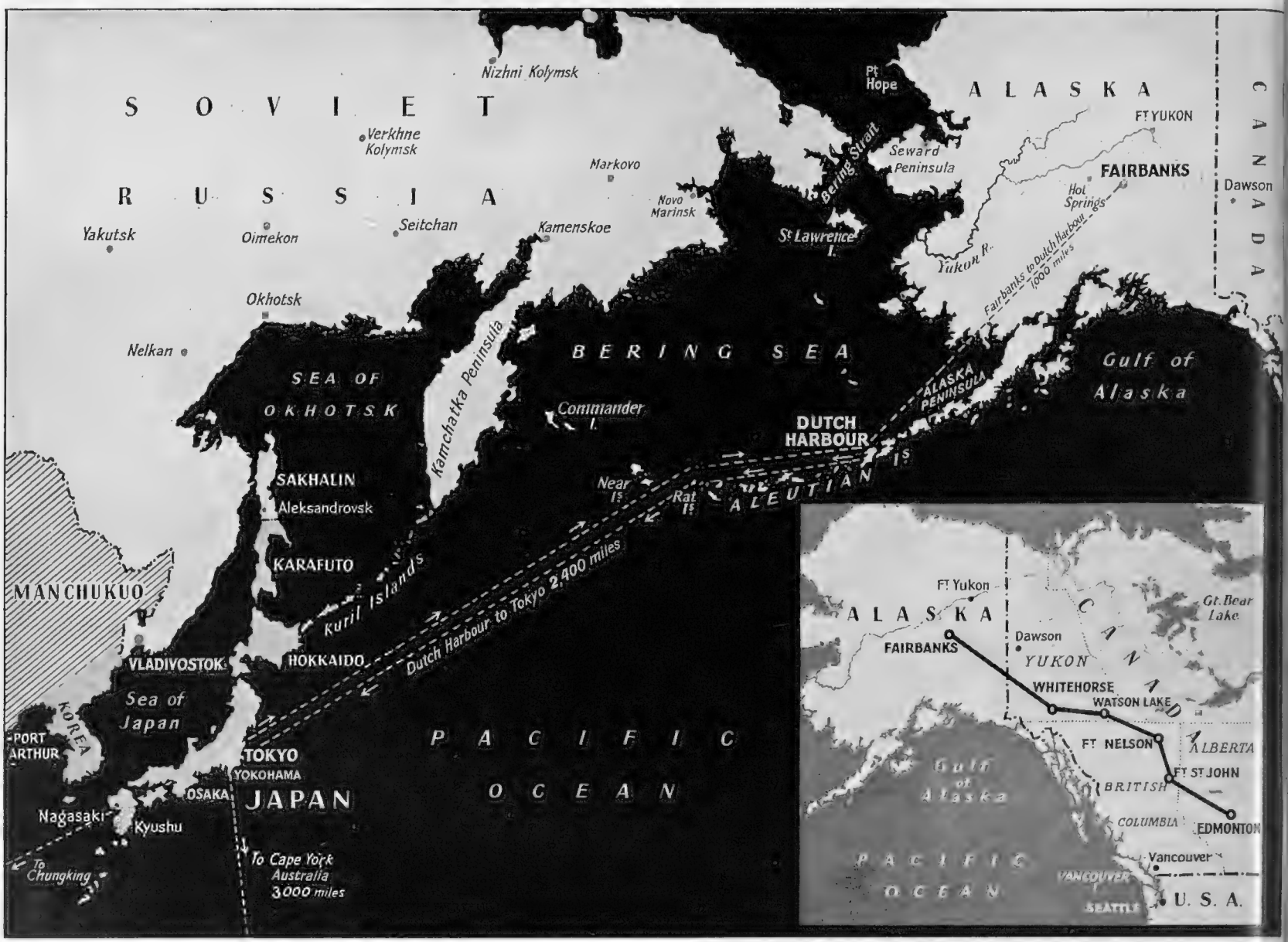
**A row of Carley Floats in a long line on the aircraft-carrier "Formidable"**

(*Continued from above*)

*Houston* as she passed. Later, H.M.S. *Encounter*, on her way to Surabaya for refuelling, saw the light and picked up the crew. Large numbers of men were clinging to the rope equipment fixed to the sides of the Float (as shown in the drawing on the left). Some Carley Floats are themselves fitted with lights, but this is not always the case

***On left*—THE USE OF THE CARLEY FLOAT IN WARTIME: A Dutch destroyer's crew saved during the Battle of the Java Sea (see notes above)**
*—Drawing by W. G. Whitaker*

# THE WAR IN THE FAR EAST, and the Part Played by China




**THE POSSIBILITY OF REACHING JAPAN BY AIR FROM U.S. BASES:** The larger portion of this map shows the distance from Dutch Harbour in the Aleutians; the smaller portion shows the new route through Canada to Alaska to connect up with Dutch Harbour and, possibly, Soviet Russia—*Special Sphere Map*

## HOW THE UNITED STATES CAN BOMB TOKYO

DIRECT air attack on the strategic bases and big industrial centres of Japan herself would quickly bring her far-flung "New Order" crashing about her ears. "The place to strike Japan," said a writer in *The Times* on January 27, "is not at the periphery of her conquests, but at the very centre of her Empire." It is not only a Hitler who can plan that deadly "blow at the heart" which paralyses the whole body of resistance: America has the power to deliver it also, by direct bombing from her own bases, on the Japanese "heartland."

The shortest way from the United States is not due west across the Pacific, but along a Great Circle course that takes one well north into Alaska and the Behring Sea. The United States has long been aware of the nearness of American territory to Asia: there are less than 60 miles of open water between them in the Behring Strait and only about 700 miles from U.S. territory in the Aleutian Islands is the great Japanese naval and air base of Paramushiro Island in the Kuriles off the tip of the Kamchatka peninsula. From the U.S. Near Islands, the "island bridge" of the Aleutians leads direct to Alaska and the maze of coastal islands along the shore of British Columbia—and the Japanese make good use of island stepping-stones. It is not surprising that in recent years great strides have been taken by the United States to put Alaska in a state of defence by the development of airfields and strategic bases, and by training her forces there in campaigning under Arctic conditions.

The chief U.S. key-points in Alaska are the great new air base at Fairbanks on which millions of dollars have recently been spent; the air bases of Juneau, Sitka, Anchorage and Nome; the important naval and air base of Kodiak on Kodiak Island in the south; and the still more important naval and air base of Dutch Harbour in Unalaska of the Aleutians, 500 miles west of Kodiak. Dutch Harbour may well be called the "Pearl Harbour" of the North Pacific; it is 2,034 miles by air from San Francisco. But during the past two years the Canadians have opened up their own airway to Alaska from Edmonton in Alberta, via Fort Nelson, Watson Lake, and Whitehorse to Fairbanks, providing a new route and chain of airfields which can be used by American planes under the present defence agreement between Canada and the United States. From Fairbanks, passage to Dutch Harbour is easy by short hops via Anchorage and Kodiak.

Across the Behring Sea is a chain of important Russian air bases—East Cape, Anadyr, the mysterious Kormandorski or Commander Islands (long a forbidden zone); Tigel, Petropavlovsk and other points in Kamchatka; Okhotsk, Nikolaevsk and Komsomolsk; the new port of Soviet Harbour, and the airports of Okha and Alexandrovsk in Sakhalin; and others on the way to the great Soviet base at Vladivostok. It is obvious, therefore, that, given the use of Russian airfields, air attacks on Tokyo by American long-distance bombers is by no means a difficult proposition, even taking into account the bad weather that prevails in winter over most of the route.

Even without using Russian airfields, direct bombing of Japanese cities by U.S. planes is still possible by the new American long-distance bombers easily capable of doing the 2,460 miles from Dutch Harbour to Tokyo and back with fuel to spare. From Dutch Harbour to Paramushiro is much shorter flight of 1,500 miles, and a combined air and sea attack on this northernmost stronghold of Japan is by no means impossible or unlikely in the near future. Paramushiro in American hands would bring United States long-distance aircraft within 1,200 miles of Tokyo.

Air attacks by home-based bombers, supplemented by raids from aircraft-carriers, would bring disaster to Japanese cities, and supported by a submarine blockade would soon put Japan out of the war.

## TWO NEW ROUTES INTO CHINA

The abandonment of Rangoon in Burma as a port of entry for war supplies to Chungking has also meant the abandonment of the Burma Road. In its place, however, there is now the Assam Road, shown in the accompanying map. This starts at Sadiya in Assam and runs by way of Chengtu to the Chinese capital—a total length of 2,200 miles against the 1,600 miles of the Burma Road. An army of 100,000 Chinese workers, both men and women, have been engaged upon it for some time. The engineering difficulties are even greater than those encountered in the building of the Burma Road, several mountain ranges having to be crossed and many great rivers to be bridged; at its peak the

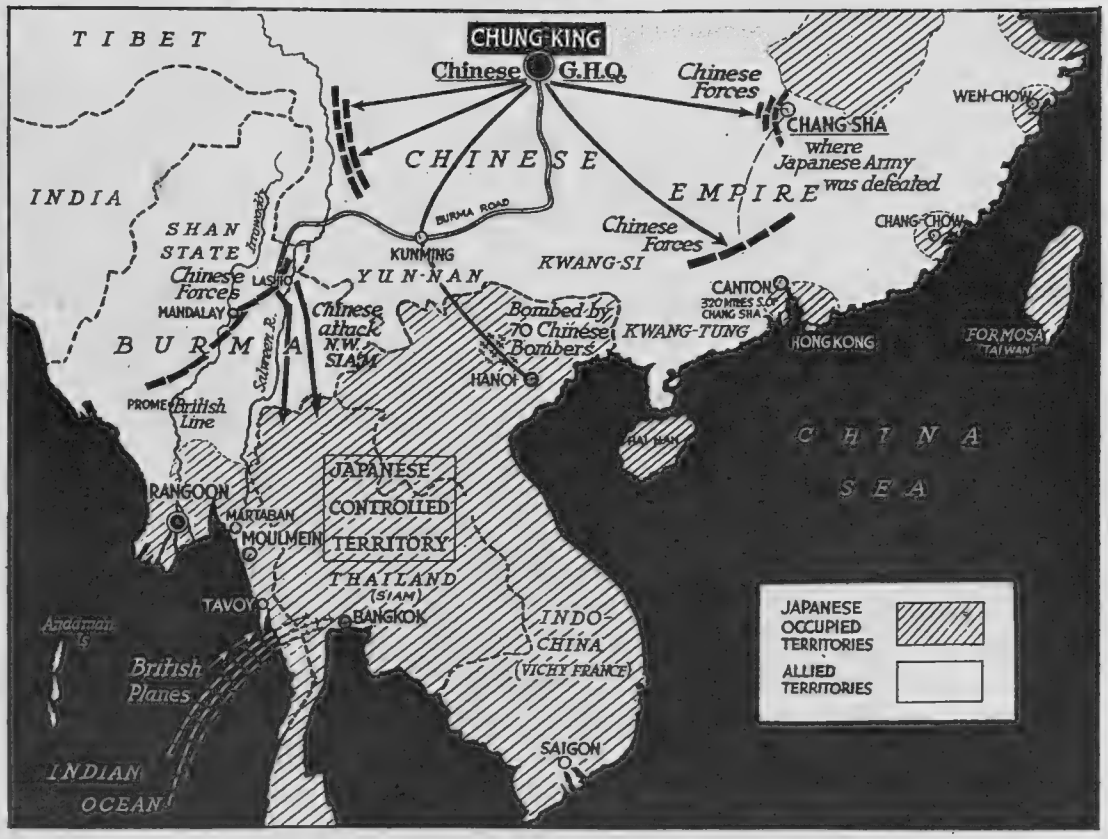
(Continued below on right)

**CHINA'S MODERN ARMY IN BURMA:** A Chinese machine-gun crew, in their gun-pit in the jungle, cover advancing infantry against low-level air attack by Jap aircraft (*a British Newsreel picture*)

TYPES OF CHINESE OFFICERS guarding the shores of South China against invasion by the Japs

## The Great Chinese Effort—

IT is five years now since Japan first invaded China and became heavily engaged with that country. Supplies to China from Britain were at first limited owing to Japanese susceptibilities, and for a time the Burma Road was closed at the direct request of the Japs, as Mr. Churchill and Mr. Eden have both intimated. To-day, China is fighting the invaders harder than ever—and now she has actually linked up with our own forces in Burma, and has also invaded treacherous Siam. The effort of the Chinese has been tremendous, and is becoming even more so. The map reproduced on the right shows the principal areas in which our Allies are now fighting—a vast area which stretches over thousands of miles from Changsha down to Burma.




THE CHINESE THEATRE OF WAR: As well as holding the Japanese at many points in China proper, our Far Eastern Allies are now also engaged in Burma. They have been fighting the Japs for five years now!

THE THREE ROUTES OF SUPPLY FOR CHINA: 1—The Burma Road (now no longer in use); 2—The new Assam route from India; and 3—The route from the U.S. across Russia

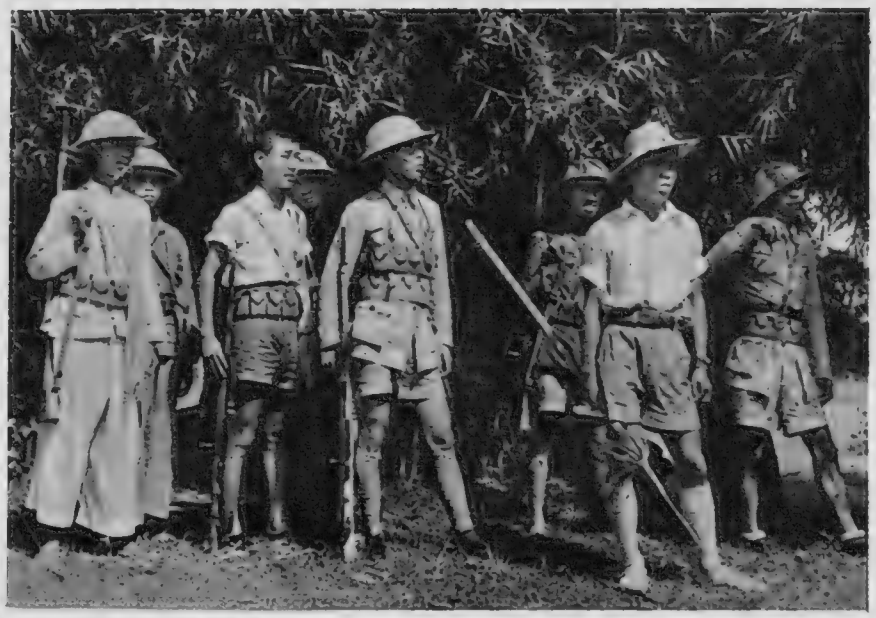
(Continued from above on left)

Assam Road rises to 9,000 ft., which is 3,000 ft. higher than the "roof" of the Burma Road.

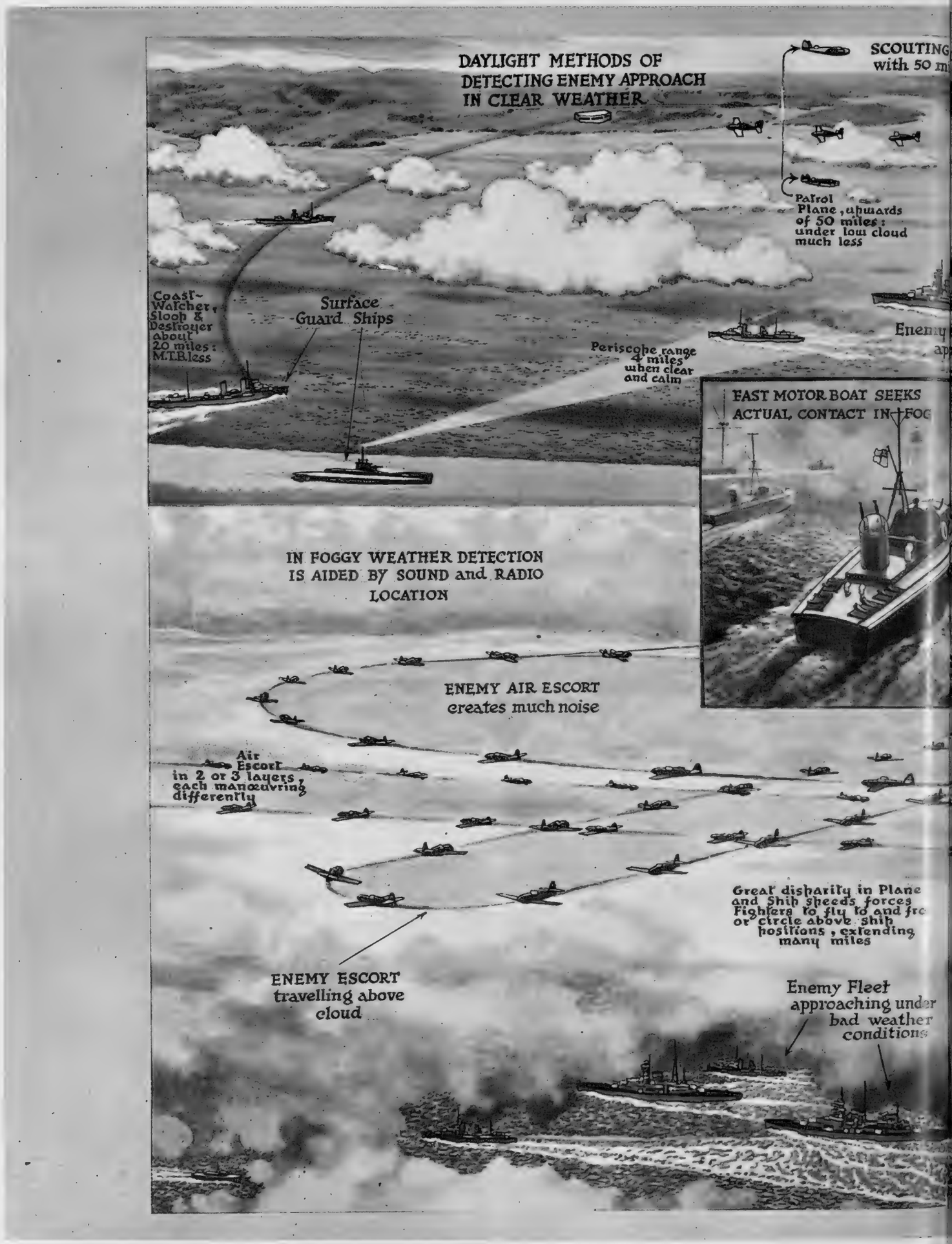
Not only will the Assam Road bring war supplies to the heart of China, but it will also serve as a link between the 400 million peoples of that country and the 350 millions of India—a link which will remain long after the present war comes to an end.

There is also another important Road indicated in the accompanying map—that from Urumchi, in Russia. By means of this "Sinkiang Road," supplies can reach Chungking from the United States, by way of the Northern Ports. This is an old Chinese road which has now been built up into a modern highway, connecting up with the Trans-Siberian Railway.

A CHINESE STAFF AT WORK: A scene in one of the many military centres established in every village along the coast of South China, where a fresh Japanese invasion might take place



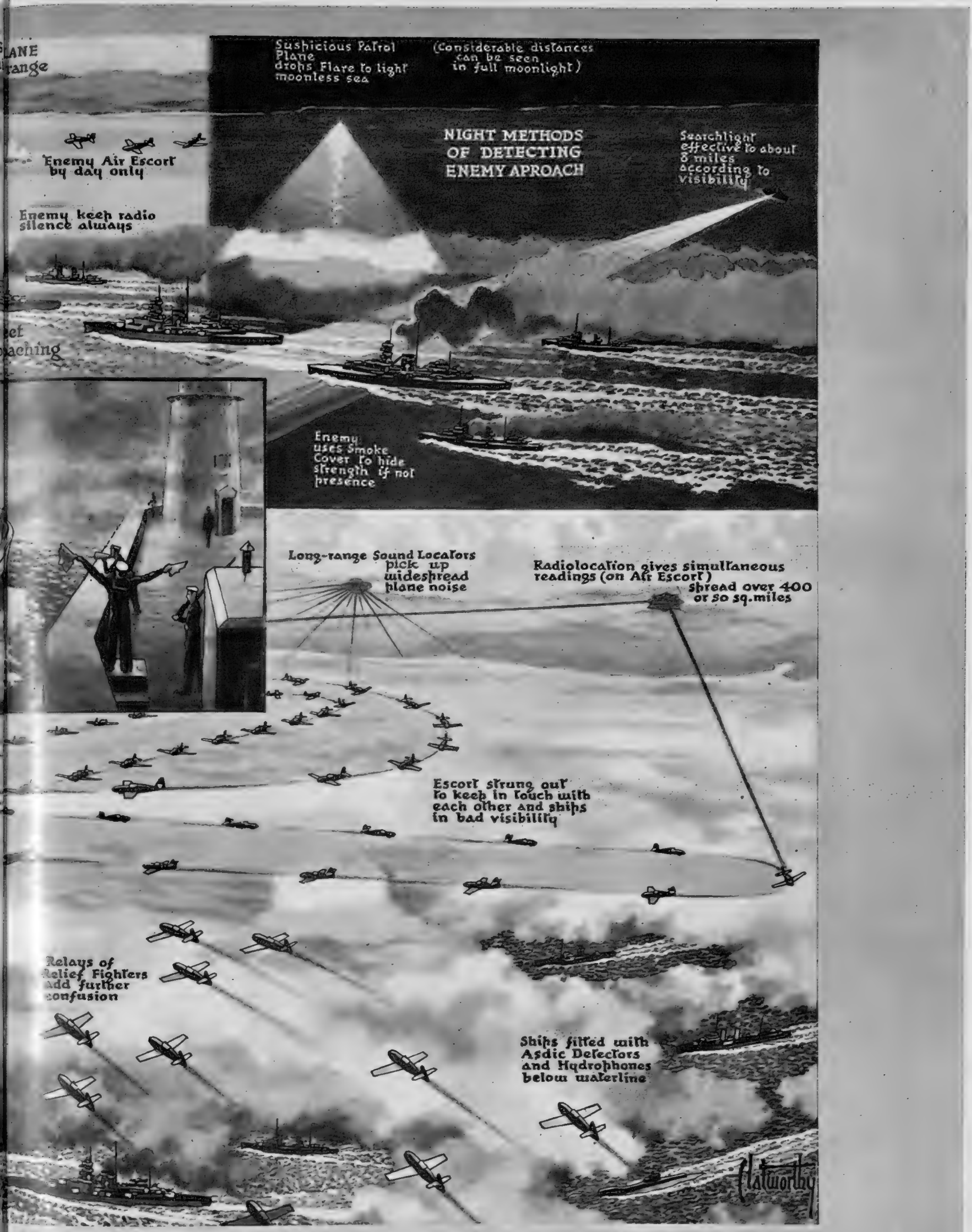
PEASANTS OF SOUTH CHINA who have everywhere formed their own units for coast defence. From the different villages thousands of peasants have organised to take part in the defence of their country




# READY FOR THE "INVASION SEASON"

The Methods by which the Approach of an Enemy by Sea is Made Known to the Defenders of Britain

*Drawing by S. W. Clatworthy (Artist's Copyright in the U.S.A.)*




Recent events have once again drawn attention to the question of how near our shores enemy vessels can approach before being detected by the defenders. Any *close* approach would be a very difficult matter indeed, and the more distant approach, too, is also almost impossible, so many eyes and agencies being engaged on the task of watching all avenues of approach. The above series of drawings shows the various means by which the presence of enemy ships can be detected. The upper panel illustrates the visual methods employed—by day on the left, by night on the right: the lower panel illustrates the sound and radio methods employed. In clear weather, the surface guard-ships have a range of twenty miles; the periscope range of a watching submarine is about four miles. Scouting planes, on their daily task of patrolling the coast, have a range of fifty miles if the visibility is good: if the pilot has to fly beneath a low cloud-ceiling his range of vision is much less. At night, the reconnaissance aircraft are still busy, flares being dropped if anything suspicious is detected: the aeroplane's own searchlight can pick up objects up to a distance of eight miles. In foggy weather, fast motor-boats put out and endeavour to make actual contact at sea with any possible invasion force. An enemy fleet, approaching under cover of fog, would have an air escort: the presence of the latter can be at once detected by the sound detectors—but, as such an escort would create a very widespread disturbance, the long-range listening apparatus would have difficulty in fixing the precise centre of the disturbance. Furthermore, owing to the far greater speed of the air escort over the fleet below, the sound would emanate from a wide area and over a definite lozenge-shaped beat: it may also be travelling in two or three layers, each on a different track. The lower panel shows the enemy fleet approaching, with further "relief" fighters joining in, to add to the confusion of the defenders. Readers should be warned not to be too depressed by the "needle in a haystack" impression: if it were permissible to tell them of the latest developments, they would feel much more confident. These islands are, indeed, being very tightly held!

# The STATE "TRIAL" at RIOM

*Where the Accused Became the Judges and where Marshal Pétain Found the Tables Turned!*

Described by FERDINAND TUOHY

EIGHT OF THE NINE JUDGES AT RIOM (on the left is the French Public Prosecutor): This is the only picture which the Vichy Government would allow to be taken in the actual Court Room

TWO sets of people wanted the Riom Trial.

It is customary for *coup d'état* Governments to wish to visit guilt upon the regimes they have supplanted, and the Pétain Cabinet decided as early as June 1940 that the way to fortify themselves before the country was to accuse the Third Republic, in the persons of its ultimate leaders, of entire responsibility for France's catastrophe. Six heads would fall, proclaimed Minister of Justice Alibert: those of Daladier, Blum, Gamelin, Reynaud, Mandel and La Chambre.

Had the trial been pushed through with rapidity, preferably behind closed doors, there is little doubt that a still stunned public would have accepted the death sentences. But legendary French legal dilatoriness was for once to operate in favour of the accused. The Law got down to its "preliminary inquiry," and before this was concluded a dossier of 100,000 typed foolscap sheets had materialised, and the tidy total of 640 witnesses had been listed for hearing at the court proceedings. And the war had reached November 1940, by which date the French as a whole had been shaken from their first bewildered hopelessness by three events: the Battle of Britain, Roosevelt's re-election and Laval's treachery, which proved too much even for Pétain. Responding to popular sentiment, the magistrates concerned with the forthcoming trial made it known that they could not accept inculpations which would have the effect of saddling the Third Republic—in other words, France—with responsibility for the war. The accused should be tried for not giving the country sufficient weapons. That ruling, as we shall see, was to spell the defeat of the whole Vichy manœuvre to fortify itself.

The second lot that wanted Riom was all Nazi. Hitler wished the French to convict themselves "voluntarily," to stage a *mea culpa* act before the universe, so that he might turn to the German people and say: "You see, as I always told you, I did not want this war. Now here you have a people assuming of their own volition the burden of war guilt such as formerly was only by the foulest action imposed on the German people by the Versailles Diktat."

Just as surely as Pétain has drawn worse than a blank at Riom, Hitler has likewise been defeated there. So much so that the Nazis want the whole trial shut down. It is due to recommence on April 13. It may be postponed *sine die*, or be continued behind closed doors; again, it may be sunk amid cataclysmical exterior happenings. Whatever its future and the fortunes of its principals, Riom should go down in history as the trial where the principal accused became, when not the prosecutors, the judges. It should make permanent reading in days to come, when the tumult has died away.

Faced by the refusal of the High Court of the State whose head he was to proceed with the original charges, "We, Phillipe Pétain," decided that the trial should be limited to responsibility for aviation and tank shortages. He thought that would cook Daladier's and Blum's goose, anyway. But there again he struck a snag. Everyone in France knew for years the annual armaments programme had been proposed by the Superior War Council, and blindly approved by successive Governments and voted as docilely by Parliament. And from 1920 to 1930 Pétain had been head of this War Council; from 1931 to 1935 Weygand; and from 1935 to 1939 Gamelin. One behind the other, these three soldiers were the responsible ones. And Pétain most of all, because, despite his age and semi-retirement, he continued to employ his vast prestige to keep nailed to the mast the ideas and technique of the last war.

Had the trial gone forward on the score of aviation and tank unpreparedness, a damning preface written by Pétain to a book published as late as 1938, by General Chauvineau, would have been read in court. The author condemned as "a dangerous Utopia" the massive use of tanks and aviation. "Tanks have no offensive value, and aviation is likewise incapable of attack." These sentiments Pétain endorsed at the beginning of 1940 with the words: "It would be, to say the least, unwise to accept the conclusions of General de Gaulle."

At the close of 1940 Pétain felt like washing Riom out altogether; it kept kicking him in the face. But that he could not do. The High Court had been duly "seized," and mortal man had not yet been born who could unseize a High Court.

THE JURY ROOM AT THE ASSIZE COURT AT RIOM: With the century-old instructions to Jurors on the mantelpiece

THE PRISON OF RIOM, a relic of the Middle Ages: This grim building is joined to the modern Palais de Justice: it dates back to the fourteenth century, when it served as a chateau of the Dukes of Auvergne. It is here that the State Prisoners—Daladier, Blum, and the others—are confined for the farce of the State Trial, the progress of which has now been suspended

Accordingly, the Vichy magicians decided on a triple course of action: (*a*) indefinite adjournment; (*b*) abandonment of death sentences; (*c*) provisional judgment rendered by Pétain himself. In August last, Pétain broadcast that he had called for a report on the accusations from a specially-constituted Council of Political Justice, and in October the Marshal followed up by announcing that he had pondered the report and had decided to imprison the accused in a fortress, apparently in permanence. Daladier, Blum, Reynaud, Mandel and Gamelin were taken to Portalet, a dripping-rock dwelling I well remember on a walk up to Urdos in the Pyrenees. La Chambre and General Jacomet were interned at Vals. And Vichy ardently hoped that Press, public, Court, everybody, would forget about the whole project for a trial.

"Oh, no, you don't!" presently prodded Abetz, acting on behalf of his master. "The Führer wants France to convict herself of having dragged Germany to war, though he will agree that England and Roosevelt put immense pressure on France. So kindly go ahead with Riom without further delay."

That was how Vichy had to be finally hauled—far more than the accused—before the Riom bench of judges under President Caous. Before a public court, moreover, in which were crammed dozens of neutral journalists—though the Americans were finally barred after four days. They had "played up" as the high light of the trial the white-haired Gamelin's refusal to open his mouth, and, of course, they were right, because if the Foch of 1940 kept silent on all matters of military preparedness, how could the accuseds' lawyers extract the truth about the military causes of the disaster? Gamelin's silence would cover Pétain, Weygand, the Army—and Gamelin himself: he who, in a written protest of August 1940, had demanded immediate trial because, as he said,

he could justify his acts. In order specially to protect the Marshal, who had been War Minister in 1934, lack of preparedness was to refer only to the years 1936-39, when either Blum or Daladier was in power. The whole set-up was as phoney as could be.

That being so, what supervened reflects some credit on the Court, not excepting the prosecuting attorney. In the eyes of Nazi "Radio-Paris," these French lawyers allowed Blum and Daladier to make a tribune of the Court, and to turn it into a "reflection of the Palais-Bourbon" (Chamber of Deputies). What the Court did was to allow the accused every opportunity to explain their defence. At no time were they bullied or shut up. They were allowed to ask any questions they desired (of all, that is, save Gamelin). And Blum's opening statement ran into seven columns of newsprint. Not at all what Vichy or Hitler had bargained for!

Far from being cowed prisoners of nearly two years' detention, the lecturing Blum and ruddy Daladier had all their erstwhile wits and pugnaciousness about them. If the Republic was going down condemned, they didn't mind going down with her, though not before they had defended her to the limit of their powers. That was the impression these two former Premiers radiated: Blum by masterly analysis, Daladier by incisive questioning. This political trial, they said, would only serve to attach French people to republican institutions. "If the Republic stands accused, we are here as her witnesses and as her defenders." As for war responsibility, Daladier said flatly and defiantly that Germany provoked the conflict by attacking Poland, and that every French citizen knew this to be the fact.

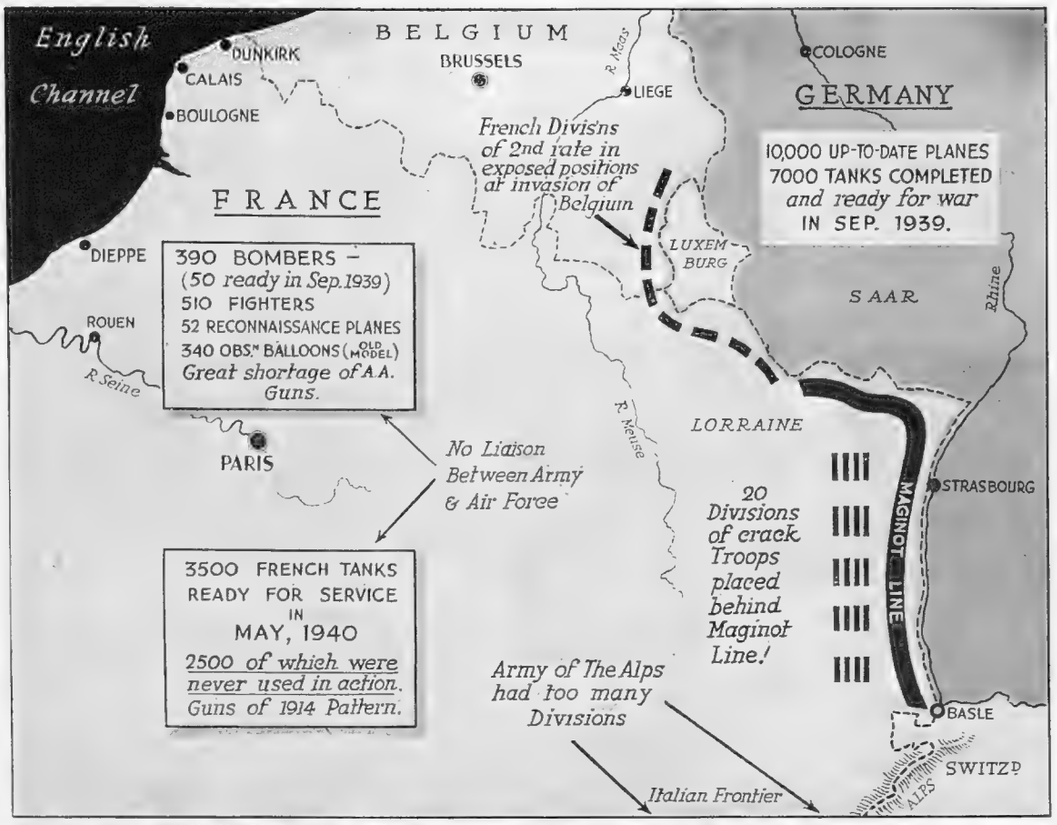
The gravamen of the charge against Blum was that, during his 1936-38 Premiership, he undermined the workers' will to fight by introducing the forty-hour week. Others would prefer a very different charge against this Jewish intellectual: that by agreeing to the non-intervention farce in Spain he allowed Hitler and Mussolini to win there the opening battles of this war. The charge against Daladier measured up to one of obstinate all-round incompetency, culminating in a light-headed declaration of war. Here, again, others well able to judge have concluded that Daladier's worst contribution lay in his unwise sparing of French blood, scarce a drop of which he would risk, thereby promoting a safety-first mentality down to the front line.

As the Riom proceedings dragged through February and March, they merged into a triple trial: of Germany, which unchained the war; of the French High Command, which conducted it so badly; and of the men of Bordeaux, who delivered France to the enemy.

As the procession of French generals—most of them former Army commanders or their equivalent—took the witness-stand, unbelievable revelations were made. Usually, they were drawn out by the tenacious Daladier. At one point the Court heard that 750 first-line aircraft were mowed away on the Italian front, when French armies in headlong retreat were sighing for the sight of a tricolour wing. No fewer than 3,500 excellent machines were, in all, kept in the background away from the fighting; with the result that such things happened as that the whole 17th Army at Luxeuil had precisely seven fighter machines when the storm broke, these being promptly destroyed on the ground. Again, over 3,000 tanks were never in the fight, but were kept at concentration points far in rear. This when General de Gaulle was beseeching Weygand for every tank he could summon up. Other high generals said that officers were not so good, and that the men were bad shots (also that they were coddled unduly, which was so). Here this general admitted the Army had turned down the dive-bomber, though Daladier had specifically had it shown at the Salon; here that general admitted that the Sedan sector, where the Germans broke through, was the least covered of all sectors on the front, with no anti-tank defences or first-line troops. Had not Marshal Pétain, in a letter to the Senate Army Commission, categorically gone on record that the Ardennes forests represented an uncrossable obstacle? That was good enough for the Army, once the great Pétain of Verdun said it!

Actually, in the months prior to the French Army's shocking debacle, Pétain was saying in Madrid that "those fellows"—meaning the Paris Government—would have need of him. He said this to the Fascist ex-Minister de Monzie, and added that the war would finish soon, and that he desired to end it at the earliest opportunity. At that time the Marshal-Ambassador was keeping touch with the German Embassy in Madrid through a third party. As one reads the story unfolded at Riom of the French High Command's ghastly showing from start to finish, it is hard to resist the conclusion that several of those leading generals were in spiritual union with their glorious Marshal and his ideas about the duration and outcome of France's war.

*P.S.*—Mandel and Reynaud have not been placed on trial because they did not assume responsibilities until after the war had begun. It is doubtful if they will ever be tried after Vichy's experience with Blum and Daladier, for both Reynaud and Mandel could bite just as deeply.




**THE PRINCIPAL DISCLOSURES AT RIOM before the farcical "Trial" came to a close: The position of affairs disclosed by M. Daladier for which the French High Command have still to find an explanation—although *they* have not been put on trial by Pétain and his Government!**—*Special* Sphere *Diagram*

"Why was France defeated so quickly that the victor was astonished?" asked M. Daladier at the trial now proceeding at Riom. He answered it himself by laying the responsibility on the military chiefs "who had the forces at their disposal, who left unused the immense material that remained in the rear." The Enquiry goes back to the arbitrary date of June 1936, chosen, according to the Prosecutor, because M. Daladier had stated that it was then there was no longer any doubt that the growing danger of Germany must be taken into account.

It now appears that, far from being ready for war, the Army was inadequately prepared in nearly all departments. Heavy artillery, in which France usually excelled, proved to have remained static since the Great War, all the guns being produced on 1914 models. The Army authorities believed that only aircraft could fight aircraft, and were therefore not enthusiastic over the powers of the anti-aircraft guns. The construction of the large 90-mm. calibre A.-A. guns was delayed and there were only 3,700 small guns ready at the opening of war. The 61st Infantry Division had not a single anti-tank gun, and another division had only six on a 20-mile front—but the importance of the tank itself was not realised. At a time when Germany was turning them out in mass production, France ordered seven at a time, so that she was outnumbered at great disadvantage when the Nazi armies advanced with massed tanks. France possessed 3,000 tanks in September 1939 against 7,000 tanks in Germany, and not only was there deficiency in numbers, but there had been little thought of the manner in which they were to be used

Attacking his accusers, M. Daladier asserted that the military commanders had not understood how to dispose the troops under their command, keeping twenty divisions of crack troops behind the Maginot, while second-rate troops were sent to guard the far more vulnerable northern frontier. The Army of the Alps also kept far more divisions than were necessary. But it was the lack of aircraft which was the chief indictment against M. Daladier and his colleagues. What had they to answer? The President of the Court brought forward significant figures concerning the number of fighters and bombers available in September 1939. Of the 510 fighter planes, only 442 were up to date; of the 390 bombers none were modern, only 52 of the 170 reconnaissance planes were new types; and all the 340 observation balloons were of old design. Only 35 bombers a month were produced before the war, but the rate was rapidly increased to 300 a month. M. La Chambre, who was in a position to know, asserted there were only fifty bombers when hostilities started; other bombers were really only reconnaissance planes. He blamed the designer, Marcel Bloch, for defects in design, and said that he had demanded his resignation, and, in fact, had made such improvements that he had handed over 3,300 planes between January 1939 and March 1940. But the 3,500 planes available in May 1940 were not properly employed, and no fewer than 2,500 planes had not been used at all

**THE ENTRANCE TO THE FRENCH "SUPREME COURT" AT RIOM, the judicial capital of Auvergne, where Vichy recently set up its Court to try those charged in connection with France's entry into the war**

# WASTE PAPER FOR THE WAR EFFORT

*Some Illuminating Facts and Figures in Connection with the Great Salvage Drive; and the Steps Taken to Secure Urgently-needed Supplies of Paper Pulp for War Purposes of all Descriptions*

By CHARLES GRAVES

SOME of you may recall my original, polite incredulity that waste paper had anything to do with munitions of war. By now, 100,000 people have visited the exhibition at the Ford Showrooms in Regent Street, where all doubt is set at rest. Waste paper is positively glamorised. You see the actual and glossy containers for 3·7-in. A.-A. shells, for 3-in. mortar shells, for those of 6-in. howitzers, and also the tail containers of 500-lb. bombs—all of which prove the importance of waste paper in winning the war in a direct way. And now that the Lease-Lend arrangement between us and the United States has, ironically enough, gone into reverse and we are having to send munitions of war to the United States, the need for paper and cardboard to pack the said munitions becomes more acute than ever.

It was less than six months ago that the Waste Paper Recovery Association was started. Its object has always been to augment all existing services for the recovery of waste paper, and to preach economies in the actual use of paper.

It is a non-profit-making organisation, and does not undertake the physical collection of paper in any way. It has, however, 750 representatives in the provinces for giving advice and help to all local authorities and voluntary organisations like the W.V.S. and Boy Scouts. They also address school-children, who are taking a natural interest in the drive.

Recently, to impress the public with the extreme importance of paper as a raw material for the munitions of war, the Waste Paper Recovery Association promoted a competition in aid of charities throughout England. £20,000 in prizes were presented, and over 95,000 tons of raw material were produced. The time allowed for the accomplishment was only a month. This was very short, and, besides, many of the local authorities were unable to remove their paper because of the severe weather. So it was an extremely good effort. In addition, it drove the message home to almost everyone in the country.

For the effort to save paper is not being relaxed in any way, and a series of drives are now either in progress or in an embryo stage. The latest one covers the whole world of music, and was arranged by Sir George Dyson. It is suggested that sheet-music for the public should be printed the same size as professional copies, and that the title pages and the usual back pages (which are generally given over to the reprinting of a bar or two of other songs) should be dispensed with.

There are over 3,000 retailers of sheet-music and 500 professional dance bands and brass bands. There are a similar number of amateur operatic societies and amateur orchestras, not to mention 10,000 music-teachers. It is suggested that, if all these people put their mind to it, they could supply a great deal of paper for the national effort. The 35,000 churches with choirs in this country must also have a great deal of unwanted choral music which would serve a better purpose than occupying space.

Almost every one of the 12,000,000 homes in Great Britain must possess a number of old songs which could easily be turned over to the authorities. A pleasant little statistic is that, if each home contributed two dozen copies of popular songs, the paper available would make 4,500,000 gun-fuses.

Among the other drives, the tobacco trade, insurance world, bookmakers, banks, brewers and police courts are all good examples of a happy hunting-ground for waste paper. Unfortunately, the Statute of Limitations has not yet been altered. If it could be reduced from seven years to, say, two years, many thousands of tons of paper would be available for the war effort. One large concern moved 100 tons of documents to a place in South London, all of them five to seven years old. On May 10 they were completely destroyed—100 tons of them. And the strange fact remains that there has been no need to refer to them since. Another big concern has had the courage to send all its documents over two years old to be pulped, but I cannot give you its name because some unscrupulous lawyer might try to take advantage of the situation.

The catering world is supporting another drive, and a committee has now been formed which represents the 63,000 hotels, cafés, canteens and boarding-houses in the country. This body is already reclaiming a considerable amount of paper, which is sold to waste-paper merchants, and the proceeds of which are devoted to their benevolent fund.

It is a curious world. Before the war dustcarts were labelled "Burn your refuse and waste paper. Save the cost of collection and reduce your rates." To-day, if people burn their waste paper, they are liable on conviction to a fine of £500 or three months in jail, or both.

Practically all paper can be salved, and people who presume that it is coming in fast enough are wrong. There are several mills near London where men and machines are standing idle because they have not sufficient raw material in the way of waste paper to complete urgent Government orders for munitions. What is worse, the demand is getting greater every day.

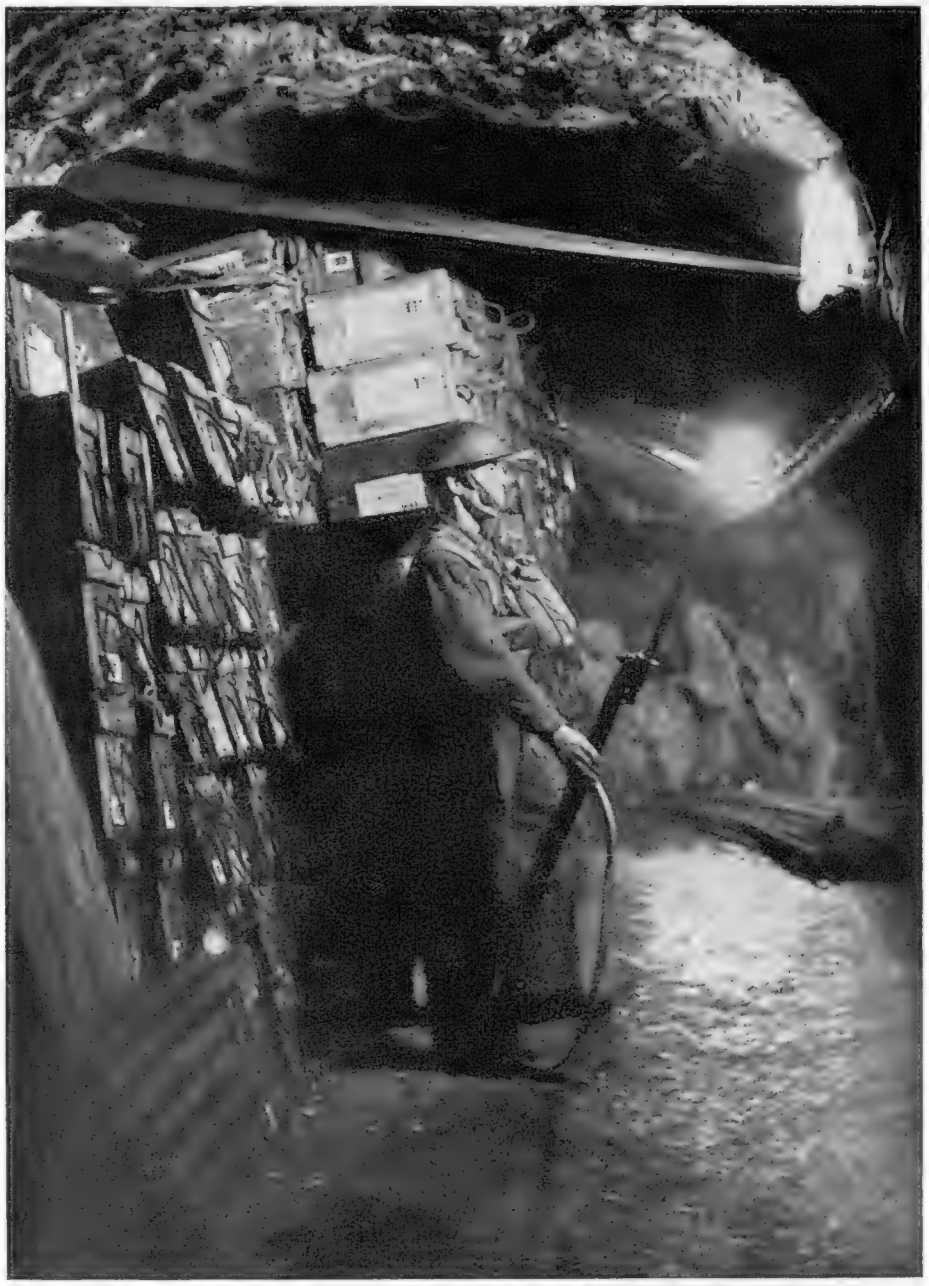
Some book publishers take the view that books should not be pulped because they are the "friend" of the person who has bought them. There is a lot in this. At the same time, most of us have a number of trashy novels which might well be turned over for munitions. There is a famous book publisher who recently received an urgent order for some charts for the Admiralty. He supplied it, and received £672. But it cost him £150,000 in cash. It so happened that he had a de luxe edition of a certain publication (which you all know) that had cost £150,000 to produce. He tore off the covers, repulped the rest, and fulfilled his Admiralty order.

A few weeks ago Major Leadlay, the leading spirit of the W.P.R.A., spoke to the hairdressers' sundriesmen—the people who furnish equipment and supplies to the hairdressers. They told him that, unless they received a minimum of 150 tons of paper per annum to make sachets used for permanent waves, 38,000 hairdressers would be thrown out of employment. Major Leadlay replied: "Fine. That releases 38,000 people for war work." To which they replied: "The Government pleads with us to dress women's hair; it keeps up their morale." Major Leadlay retorted: "In Russia they don't bother about giving permanent waves, but there 's nothing wrong with their morale."

The B.B.C. has played up very well in this campaign for saving paper, and on one occasion Tommy Handley devoted his entire programme to the subject. The newspapers naturally do their best. For in peacetime we used to import over 1,000,000 tons of paper annually, and about double that quantity of wood pulp and other raw materials which went into the manufacture of paper of all kinds. We had Scandinavia at our doorstep, Finland not much farther away and Canada about a week away. To-day Scandinavia is in enemy hands, and we have not the ships to bring the necessary newsprint from Canada.

Newspapers used to consume about 24,000 tons of paper per week. This is now down to 4,000 tons, and further reductions are anticipated. The newspapers realise that, if we are to carry on the war, we must provide our own raw material, in which waste paper plays an important part. In fact, we have to live on our fat, and the situation is not going to be any better, because the less paper we use the less paper there is to be salved.

Sometimes, after spectacular campaigns like the £20,000 competition of a few weeks ago, the public is inclined to believe that the target has been reached and nothing more need be done. The reverse is the case. And, I repeat, the Lease-Lend Act has gone into reverse. For this reason alone we all of us ought really to see what we can hand over in the way of old books, programmes, letters, magazines, photographs, and the hundred-and-one other trifles which we have not had the heart to destroy because we felt that they might be worth looking at again.



**ONE OF THE PLACES TO WHICH YOUR WASTE PAPER EVENTUALLY GOES:** Gibraltar's underground defences consist of galleries leading to fortifications overlooking the surrounding sea and country. They include living quarters of modern construction, with electric light and fresh water, where a long siege could be borne with a minimum of discomfort. Miles of tunnels connect by passages to defence departments where gun crews stand ready day and night. The gallery whence the Administration would be directed in the event of war operations is well protected. All the departments would work in close co-operation with each other by telephone and runner. Also there are outlying forts and blockhouses covering all the lines of approach. Within the boxes guarded by the sentry above are stores of ammunition: into these have gone much of the paper salvaged throughout the country during recent weeks; when repulped this paper is used for ammunition and shell containers

One ton of paper can be turned into any of the following:

- 1,500 shell containers
- 9,000 shell fuse components
- 11,000 mine assemblies
- 71,000 dust covers for aero engines
- 36,000 cut-out targets
- 3,000 boxes for aero-cannon shells

# THE NEW WATERLOO BRIDGE

*And Other Topical Wartime Pictures*

**WATERLOO BRIDGE SHORTLY TO BE OPENED : A fine view from the north side, showing the bridge nearly completed ; on the left is the temporary iron structure which has taken cross-river traffic for some years**

**THE ROADWAY AND PARAPETS ARE NOW ALMOST COMPLETE :** The new Waterloo Bridge, it is hoped, may be opened to traffic in September of this year. It will have six lines of traffic, but only two of these will be in use at first. Started in 1938, the bridge is estimated to have cost one and a quarter millions. There are five spans of about 238 ft. Work has gone on steadily, despite the heavy air attacks on London

**IRLS OF THE A.T.S. " DELIVER THE GOODS " TO THE ARMY :** A.T.S. girl drivers have just made a one hundred miles trek across country from Bedfordshire to Gloucestershire. Picking up new heavy lorries for service in the Army, they successfully delivered these on schedule to the R.A.S.C. depot to which they were consigned. The girls employed on this work are all skilled in their job, and their employment has released numbers of fit men for other duties with the Forces

**THE LORRY CONVOY DRIVEN BY A.T.S. GIRLS passing through some pretty Bedfordshire country en route for Gloucestershire, one hundred miles away**

**HOW LARGE TREES ARE FELLED FOR WAR PURPOSES : The big trunks arrive at the saw-mill located in the forest and are cut up for pit-props and telegraph-poles**

**SAWING DOWN A BIG OAK NEAR THE ROOT :** This is a major war effort which is being carried out by skilled woodsmen. The wood is needed for vital war purposes, the smaller trees being used for pit-props and telegraph-poles. In many cases the trunks weigh six tons, and may be valued at £20 apiece. Different varieties are felled—oak, chestnut, etc. When the felled trees have been removed from the forest, numbers of Land Girls and others burn up the waste and clean up the sections of cleared ground. This work goes on from early morning till dusk

The World of Books—By Vernon Fane

# BOOKS ARE GETTING SCARCE!

*But Period Pieces Survive ; Sir Harry Brittain the Proud Pilgrim ; A Wistful Chinese and a Tough American ; Spenlove in Love*

THE figures of the number of books published in 1941 show a drop of 32·42 per cent. on the 1940 total, and it is significant that of the titles published, the largest decrease is of 38·23 per cent. in fiction. The other class of book most in library demand, i.e., those classified as biography and memoirs, show a significant drop from 444 in 1940 to 356 in 1941. Since these figures were compiled, further restrictions have been imposed on paper supply, and a further drop in the number of new titles issued may be anticipated in the current period.

Meanwhile, reprints are the publishers' most pressing problem, and many hundreds, if not thousands, of standard works in the current lists are now unobtainable. To hold the balance between the apparently necessary new and the obviously necessary old title must be a problem which the hard-pressed publishing trade is daily finding difficult to answer.

THE R.A.F. TRAIN IN AMERICA : From left to right are Lionel Anderson (of London) ; Robert Baiter (London) ; S. Fuller (Sandhurst) ; and Ken Gaze (London). Also, from left to right, are the latest periodicals to reach them—"The Sphere" and its associated journals, "The Tatler" and "The Sketch"

So that when Miss D. M. Stuart sub-titles **THE MOTHER OF VICTORIA** (Macmillan. 15s.) "A Period Piece," the term, to-day, has more than one application. This book is as charmingly written and as painstakingly compiled as was the author's *The Daughters of George III.* Most phases of the life of Queen Victoria have been thoroughly explored and written about from most points of view, but no one, as far as I know, has gone so thoroughly into the formative years from 1830-37 or has made so complete a study of Victoria, Duchess of Kent.

The period of unfilial hostility is, of course, well known, and the trouble to which the Prince Consort had to go to cover it is well understood. Yet the training, character and upbringing of Victoria's mother is here placed in real perspective. The ambiguities of her relationship with her Comptroller, Sir John Conroy, gave rise to scandal which may not have had much foundation in fact, but which was not assisted by her own actions and by her own very difficult personality.

In Regency society she occupied a peculiar position *vis-à-vis* her brothers and sisters-in-law, and there was a moment, when the Sailor King was on the throne, when her relationship to the Heiress Presumptive was something in which she was not only being badly advised, but not handling very tactfully herself.

This is a book which is full of lively writing and good atmosphere, and one which goes deeply into the social and political scene in one of the most interesting periods of English dynastic history.

Sir George Leveson Gower's **YEARS OF ENDEAVOUR** (John Murray. 15s.) is another period piece, and will probably be one of the last published specimens of this type of book. It is, in fact, a second volume of the author's reminiscences which he began with *Years of Content*, the period covered in this book being from 1886 to 1907.

Sir George Leveson Gower writes of men and memories of a decade in which the old Whig families were still wielding considerable power and influence. He was a Whip in those Parliaments in which the great Liberal Party was in the political wilderness, and remained a power in its inner councils up to the time of its subsequent triumphs. The book is very much in its period, full of the good humour, easy manners, social graces and leisured approach to large problems which were typical of those days. Some of the stories and anecdotes bear the retelling in these pages, and on the whole it is a social document which may not be without value to future historians.

*The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export*

A timely publication is **PILGRIM PARTNERS**, by Sir Harry Brittain (Hutchinson. 10s. 6d.). This book, which contains a characteristic and charming foreword by Lord Derby, is a record of the forty years of British-American fellowship which had been cemented by that unique organisation known as "The Pilgrims."

This Society was founded in 1902, with one section in England and one in America. It has been described by a New York newspaper as "probably the most distinguished international organisation in the world." It is significant that each incoming American or British Ambassador receives his initial welcome from the Pilgrims, and gives his first address to the peoples of Britain or America respectively from a Pilgrims' gathering. At a time in the world's history when the English-speaking peoples are demonstrating their solidarity and determination to fight against the forces of evil, a record such as this is a heartening and indeed inspiring publication. No one has worked more assiduously in the cause of Anglo-American fellowship than Sir Harry Brittain, and it is in no small part due to his zeal that the Pilgrims can to-day point to such a fine record of achievement.

With **THE THREE BLOSSOMS OF CHANG-AN**, by Keith West (Cresset Press. 8s.), we enter the realm of pure fiction. The author introduces his tale by the familiar device of a scroll found in a coffin. Thus the period can be ancient, though dateless, China, and the style can draw without too much discrimination from the idiom of the original language and that of a contemporary translation.

Lien Kin Wai was a provincial magistrate, but being in period he was also young, learned and more than something of a poet. His story concerns his Three Blossoms, or, to put it more bluntly, the three women he loved. These were Hibiscus, whom he married ; Jasmin, who became his concubine ; and Pæony, for whom no official relationship could be found in his life.

Although the style is deliberately mannered, and therefore leisuredly, and although the atmosphere and action are set in unfamiliar places, the author contrives with considerable ingenuity to impart speed and continuity to the story. This technique also rescues the narrative from the purely erotic level upon which it is in danger of resting for lack of spiritual and other values.

On the score of technique also the author contrives a plausible and dramatic climax which requires all his skill to make it credible. The novel has a unique charm and atmosphere of its own, and, incidentally, is far more worth reading than most real translations from the Chinese.

Mr. Jerome Weidman is an American novelist of the tough school who has in his time received praise from no less a critic than Miss Rebecca West. Readers of *I Can Get It for You Wholesale* will remember that there is not much that Mr. Weidman does not know about the seamy side of New York life, and in particular that section of it which is engaged in the garment industry.

In **I'LL NEVER GO THERE ANY MORE** (Heinemann. 9s. 6d.), he moves out of the circumscribed area of Third and Fourth Avenues into an equally fascinating side of that city's life inhabited by shady lawyers and curious firms of chartered accountants. Although his story is written in the first person by a comparatively innocuous character called Arthur Thacker, the real hero of it is a once-famous and wealthy criminal lawyer named Max Maggio. The egregious Max has made two fortunes, lost one by an act of quixotic generosity to his own family, and the other in the famous stock-market crash. Eventually, he had been disbarred and was working for a dubious firm of accountants.

Fortuitously, Arthur Thacker's life becomes inextricably bound up with this forceful, dominating and erratic character, and in his company the reader is introduced to a phase of New York life about which very few people know. There is a good deal of rough and tough stuff in this novel, and a number of unsavoury incidents and expressions which add very little but unpleasantness to the story. Nevertheless, it is full of the vigour, lively observation and wit which we have learned to expect from this author. The English proof-readers might have saved him from this one : "He had the tailored moustache and the deep, tanned creases of a First Lord of the Admiralty."

Mr. William McFee, who is an English author resident for some years in America, has, through his novels and tales of the sea, established as a popular character in contemporary fiction Chief Engineer Spenlove. **SPENLOVE IN ARCADY** (Faber and Faber. 10s. 6d.) reintroduces this lovable character. His Arcady is New England, and in this story Spenlove has retired from the sea and bought an old house in Connecticut. Untrue to the tradition that sailormen, when they retire, retire as far from the sea as they possibly can, Spenlove hopes to turn his hand to boat-building, and his mind to meditation. But all that is to be changed by Mrs. Ducroy and her daughter, who invade his Arcady.

In fact, Spenlove falls in love with her, and this is his love-story told, for a change, through a third person. Mr. McFee is at his best with a character whom he knows and understands and in a country which he so obviously loves.

AT AN ARMY SALVAGE DEPOT : All the salvage collected from London units of the Army is expertly graded at the London District Central Salvage Depot : the men engaged on this work are a special branch of the Pioneer Corps. Here cardboard boxes are seen being pulped for salvage

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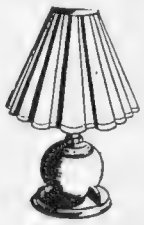
*that's strategy;*

*I have it on you . . . . . .*

*that's tactics!"*



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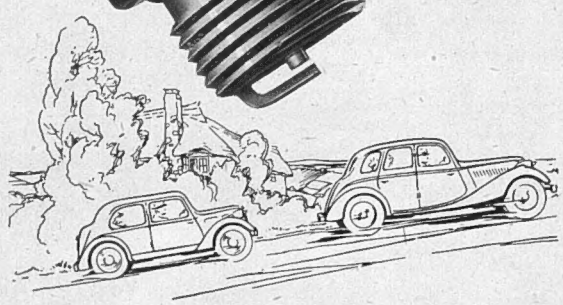

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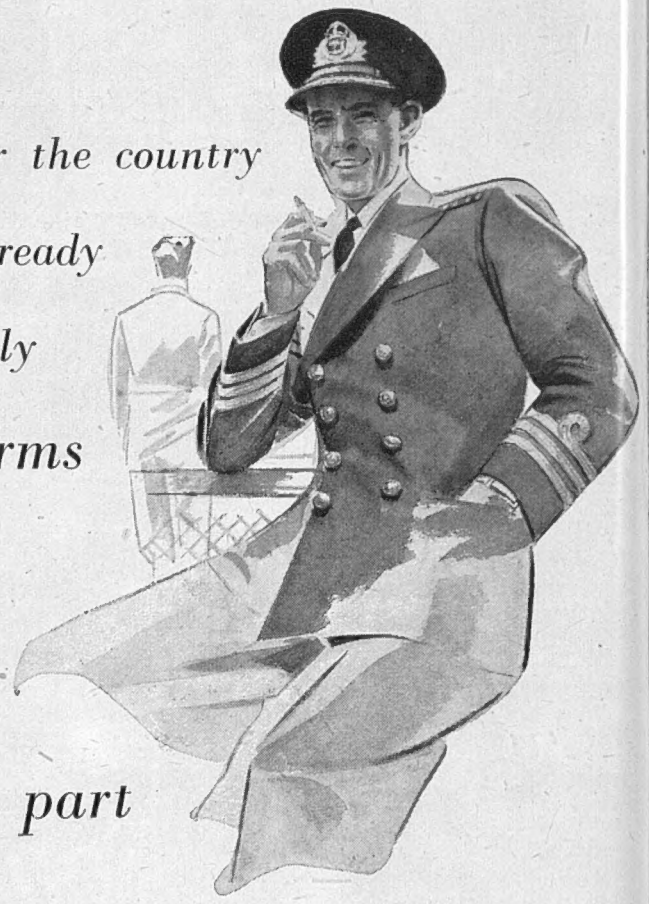

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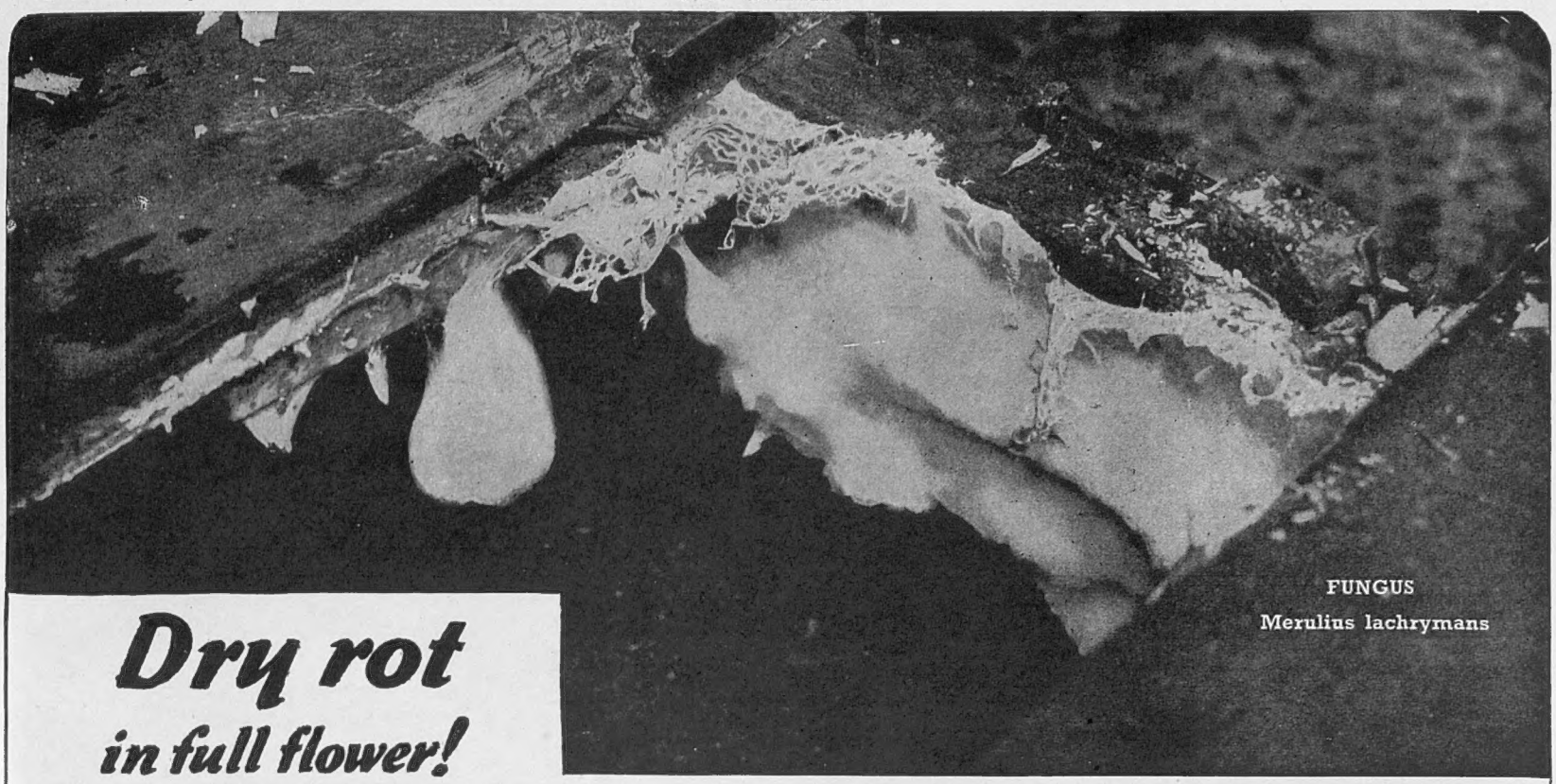

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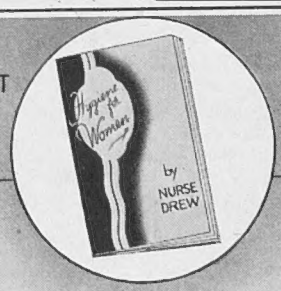


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